PART 70 OPERATING PERMIT
and ENHANCED NEW SOURCE REVIEW
OFFICE OF AIR MANAGEMENT

CMI-Precision Mold, Inc.
51650 County Road 133
Bristol, Indiana 46507

(herein known as the Permittee) is hereby authorized to operate subject to the conditions contained herein, the source described in Section A (Source Summary) of this permit.

This permit is issued in accordance with 326 IAC 2 and 40 CFR Part 70 Appendix A and contains the conditions and provisions specified in 326 IAC 2-7 and 326 IAC 2-1-3.2 as required by 42 U.S.C. 7401, et. seq. (Clean Air Act as amended by the 1990 Clean Air Act Amendments), 40 CFR Part 70.6, IC 13-15 and IC 13-17.

Operation Permit No.: T039-6890-00191	
Issued by: Janet G. McCabe, Assistant Commissioner Office of Air Management	Issuance Date:

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SECTION A SOURCE SUMMARY

This permit is based on information requested by the Indiana Department of Environmental Management (IDEM), Office of Air Management (OAM). The information describing the source contained in conditions A.1 through A.3 is descriptive information and does not constitute enforceable conditions. However, the Permittee should be aware that a physical change or a change in the method of operation that may render this descriptive information obsolete or inaccurate may trigger requirements for the Permittee to obtain additional permits or seek modification of this permit pursuant to 326 IAC 2, or change other applicable requirements presented in the permit application.

A.1 General Information [326 IAC 2-7-4(c)] [326 IAC 2-7-5(15)]

The Permittee owns and operates a stationary aluminum foundry manufacturing cast and machined aluminum products.

Responsible Official:	Greg Guilliams
Source Address:	51650 County Road 133, Bristol, Indiana 46507
Mailing Address:	51650 County Road 133, Bristol, Indiana 46507
SIC Code:	3365, 3398
County Location:	Elkhart
County Status:	Attainment for all criteria pollutants
Source Status:	Part 70 Permit Program Major Source, under PSD Rules; Major Source, Section 112 of the Clean Air Act

A.2 Emission Units and Pollution Control Equipment Summary [326 IAC 2-7-4(c)(3)] [326 IAC 2-7-5(15)]

This stationary source consists of the following emission units and pollution control devices:

(a) One (1) melting and combustion operation (Unit 001) consisting of one (1) reverberatory furnace A processing aluminum at a maximum rate of 4.75 tons per hour, rated at 9.1 million (MM) British thermal units (Btu) per hour, combusting natural gas, and exhausting to one (1) stack (Stack 001);

(b) One (1) melting and combustion operation (Unit 002) consisting of one (1) reverberatory furnace B processing aluminum at a maximum rate of 4.75 tons per hour, rated at 9.1 MMBtu per hour, combusting natural gas, and exhausting to one (1) stack (Stack 001);

(c) One (1) melting and combustion operation (Unit 020) consisting of one (1) reverberatory furnace C processing aluminum at a maximum rate of 6.0 tons per hour, rated at 22.8 MMBtu per hour, combusting natural gas, and exhausting to one (1) stack (Stack 020);

(d) One (1) melting and combustion operation (Unit 021) consisting of one (1) reverberatory furnace D processing aluminum at a maximum rate of 6.0 tons per hour, rated at 22.8 MMBtu per hour, combusting natural gas, and exhausting to one (1) stack (Stack 021);

(e) One (1) melting and combustion operation (Unit 022) consisting of one (1) reverberatory furnace E processing aluminum at a maximum rate of 3.0 tons per hour, rated at 20.4 million MMBtu per hour, combusting natural gas, and exhausting to one (1) stack (Stack 022);

(f) One (1) semi-permanent molding operation (Unit 100) consisting of one (1) semi-permanent turntable and six (6) casting machines with molds sent to a casting monorail, processing aluminum at a maximum rate of 2.0 tons per hour, and exhausting through three (3) roof exhaust fans (Stacks 100a, 100b, and 100c);

(g) One (1) semi-permanent molding operation (Unit 101) consisting of one (1) semi-permanent turntable and six (6) casting machines with molds sent to a casting monorail, processing aluminum at a maximum rate of 2.0 tons per hour, and exhausting to four (4) roof exhaust fans (Stacks 101a, 101b, 101c, and 101d);

(h) One (1) semi-permanent molding operation (Unit 102) consisting of one (1) semi-permanent turntable and six (6) casting machines with molds sent to a casting monorail, processing aluminum at a maximum rate of 2.0 tons per hour, and exhausting to four (4) roof exhaust fans (Stacks 102a, 102b, 102c, and 102d);

(i) One (1) semi-permanent molding operation (Unit 103) consisting of one (1) prototype semi-permanent mold turntable (operation is not necessarily performed on any particular turntable) and six (6) available casting machines (operations are performed on individual casting machines) with molds sent to a casting monorail, processing aluminum at a maximum rate of 0.5 tons per hour, and exhausting to the general plant atmosphere;

(j) One (1) core making operation (Unit 200) consisting of five (5) sand silos, three (3) sand heaters, four (4) sand mixers, eight (8) core machines, and storage racks, processing sand and resin with a maximum sand process rate of 4.5 tons per hour, with one (1) dust collector (DC-1) on sand silos #3 and #4 for particulate control which exhausts through one (1) stack (Stack 200a), and eight (8) acid scrubbers on the core machines for VOC control which exhaust through five (5) stacks (Stacks 200b through 200f);

(k) One (1) prototype core making operation (Unit 210) consisting of one (1) sand silo, one (1) sand mixer, and storage racks, processing sand and resin with a maximum sand process rate of 0.25 tons per hour. This operation is portable and can utilize sand from any of the five sand silos in the core making operation (Unit 200);

(l) One (1) core removal operation (Unit 230) consisting of a core knockout room with multiple automatic knockout hammers, with a maximum sand throughput of 4.75 tons per hour, exhausting to two (2) stacks (Stacks 230 a-b); and

(m) One (1) mold blasting room (Unit 350) with a maximum capacity of 31.2 tons of steel molds per hour and 3 tons of blasting material per hour, controlled by a baghouse, with emissions exhausting through one (1) stack (Stack 350).

A.3 Specifically Regulated Insignificant Activities [326 IAC 2-7-1(21)] [326 IAC 2-7-4(c)] [326 IAC 2-7-5(15)]

This stationary source also includes the following insignificant activities which are specifically regulated, as defined in 326 IAC 2-7-1(21):

(a) Grinding and machining operations controlled with fabric filters, scrubbers, mist collectors, wet collectors and electrostatic precipitators with a design grain loading of less than or equal to 0.03 grains per actual cubic foot and a gas flow rate less than or equal to 4000 actual cubic feet per minute, including the following: deburring; buffing; polishing; abrasive blasting; pneumatic conveying; woodworking operations; and specifically the following:

(1) One (1) shot blasting operation (Unit 360), consisting of one (1) shot blast machine controlled by one (1) dust collector, with a maximum capacity of processing 2.16 tons of aluminum castings per hour.

A.4 Part 70 Permit Applicability [326 IAC 2-7-2]

This stationary source is required to have a Part 70 permit by 326 IAC 2-7-2 (Applicability) because:

(a) It is a major source, as defined in 326 IAC 2-7-1(22);

(b) It is a source in a source category designated by the United States Environmental Protection Agency (U.S. EPA) under 40 CFR 70.3 (Part 70 - Applicability).

SECTION B GENERAL CONDITIONS

B.1 Permit No Defense [326 IAC 2-1-10] [IC 13]

(a) Indiana statutes from IC 13 and rules from 326 IAC, quoted in conditions in this permit, are those applicable at the time the permit was issued. The issuance or possession of this permit shall not alone constitute a defense against an alleged violation of any law, regulation or standard, except for the requirement to obtain a Part 70 permit under 326 IAC 2-7.

(b) This prohibition shall not apply to alleged violations of applicable requirements for which the Commissioner has granted a permit shield in accordance with 326 IAC 2-1-3.2 or 326 IAC 2-7-15, as set out in this permit in the Section B condition entitled “Permit Shield.”

B.2 Definitions [326 IAC 2-7-1]

Terms in this permit shall have the definition assigned to such terms in the referenced regulation. In the absence of definitions in the referenced regulation, any applicable definitions found in IC 13-11, 326 IAC 1-2 and 326 IAC 2-7 shall prevail.

B.3 Permit Term [326 IAC 2-7-5(2)]

This permit is issued for a fixed term of five (5) years from the effective date, as determined in accordance with IC 4-21.5-3-5(f) and IC 13-15-5-3.

B.4 Enforceability [326 IAC 2-7-7(a)]

(a) All terms and conditions in this permit, including any provisions designed to limit the source's potential to emit, are enforceable by IDEM.

(b) Unless otherwise stated, terms and conditions of this permit, including any provisions to limit the source’s potential to emit, are enforceable by the United States Environmental Protection Agency (U.S. EPA) and citizens under the Clean Air Act.

B.5 Termination of Right to Operate [326 IAC 2-7-10] [326 IAC 2-7-4(a)]

The Permittee's right to operate this source terminates with the expiration of this permit unless a timely and complete renewal application is submitted at least nine (9) months prior to the date of expiration of the source’s existing permit, consistent with 326 IAC 2-7-3 and 326 IAC 2-7-4(a).

B.6 Severability [326 IAC 2-7-5(5)]

The provisions of this permit are severable; a determination that any portion of this permit is invalid shall not affect the validity of the remainder of the permit.

B.7 Property Rights or Exclusive Privilege [326 IAC 2-7-5(6)(D)]

This permit does not convey any property rights of any sort, or any exclusive privilege.

B.8 Duty to Supplement and Provide Information [326 IAC 2-7-4(b)] [326 IAC 2-7-5(6)(E)]

(a) The Permittee, upon becoming aware that any relevant facts were omitted or incorrect information was submitted in the permit application, shall promptly submit such supplementary facts or corrected information to:

Indiana Department of Environmental Management
Permits Branch, Office of Air Management
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

(b) The Permittee shall furnish to IDEM, OAM, within a reasonable time, any information that IDEM, OAM may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with this permit.

(c) Upon request, the Permittee shall also furnish to IDEM, OAM copies of records required to be kept by this permit. If the Permittee wishes to assert a claim of confidentiality over any of the furnished records, the Permittee must furnish such records to IDEM, OAM along with a claim of confidentiality under 326 IAC 17. If requested by IDEM, OAM, or the U.S. EPA, to furnish copies of requested records directly to U. S. EPA, and if the Permittee is making a claim of confidentiality regarding the furnished records, then the Permittee must furnish such confidential records directly to the U.S. EPA along with a claim of confidentiality under 40 CFR 2, Subpart B.

B.9 Compliance with Permit Conditions [326 IAC 2-7-5(6)(A)] [326 IAC 2-7-5(6)(B)]

(a) The Permittee must comply with all conditions of this permit. Noncompliance with any provisions of this permit constitutes a violation of the Clean Air Act and is grounds for:

(1) Enforcement action;

(2) Permit termination, revocation and reissuance, or modification; or

(3) Denial of a permit renewal application.

(b) It shall not be a defense for the Permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

B.10 Certification [326 IAC 2-7-4(f)] [326 IAC 2-7-6(1)]

(a) Any application form, report, or compliance certification submitted under this permit shall contain certification by a responsible official of truth, accuracy, and completeness. This certification, and any other certification required under this permit, shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

(b) One (1) certification shall be included, on the attached Certification Form, with each submittal.

(c) A responsible official is defined at 326 IAC 2-7-1(34).

B.11 Annual Compliance Certification [326 IAC 2-7-6(5)]

(a) The Permittee shall annually submit a compliance certification report which addresses the status of the source's compliance with the terms and conditions contained in this permit, including emission limitations, standards, or work practices.

The certification shall cover the time period from January 1 to December 31 of the previous year, and shall be submitted in letter form no later than April 15 of each year to:

Indiana Department of Environmental Management
Compliance Data Section, Office of Air Management
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

and

United States Environmental Protection Agency, Region V
Air and Radiation Division, Air Enforcement Branch - Indiana (AE-17J)
77 West Jackson Boulevard
Chicago, Illinois 60604-3590

(b) The annual compliance certification report required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAM on or before the date it is due.

(c) The annual compliance certification report shall include the following:

(1) The identification of each term or condition of this permit that is the basis of the certification;

(2) The compliance status;

(3) Whether compliance was based on continuous or intermittent data;

(4) The methods used for determining compliance of the source, currently and over the reporting period consistent with 326 IAC 2-7-5(3);

(5) Any insignificant activity that has been added without a permit revision;

(6) Such other facts, as specified in Sections D of this permit, as IDEM, OAM may require to determine the compliance status of the source.

The submittal by the Permittee does require the certification by the “responsible official” as defined by 326 IAC 2-7-1(34).

B.12 Preventive Maintenance Plan [326 IAC 2-7-5(1),(3) and (13)] [326 IAC 2-7-6(1) and (6)] [326 IAC 1-6-3]

(a) If required by specific condition(s) in Section D of this permit, the Permittee shall prepare and maintain Preventive Maintenance Plans (PMP) within ninety (90) days after issuance of this permit, including the following information on each facility:

(1) Identification of the individual(s) responsible for inspecting, maintaining, and repairing emission control devices;

(2) A description of the items or conditions that will be inspected and the inspection schedule for said items or conditions;

(3) Identification and quantification of the replacement parts that will be maintained in inventory for quick replacement.

If due to circumstances beyond its control, the PMP cannot be prepared and maintained within the above time frame, the Permittee may extend the date an additional ninety (90) days provided the Permittee notifies:

Indiana Department of Environmental Management
Compliance Branch, Office of Air Management
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

(b) The Permittee shall implement the Preventive Maintenance Plans as necessary to ensure that lack of proper maintenance does not cause or contribute to a violation of any limitation on emissions or potential to emit.

(c) PMP's shall be submitted to IDEM, OAM upon request and shall be subject to review and approval by IDEM, OAM.

B.13 Emergency Provisions [326 IAC 2-7-16]

(a) An emergency, as defined in 326 IAC 2-7-1(12), is not an affirmative defense for an action brought for noncompliance with a federal or state health-based emission limitation, except as provided in 326 IAC 2-7-16.

(b) An emergency, as defined in 326 IAC 2-7-1(12), constitutes an affirmative defense to an action brought for noncompliance with a health-based or technology-based emission limitation if the affirmative defense of an emergency is demonstrated through properly signed, contemporaneous operating logs or other relevant evidence that describe the following:

(1) An emergency occurred and the Permittee can, to the extent possible, identify the causes of the emergency;

(2) The permitted facility was at the time being properly operated;

(3) During the period of an emergency, the Permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards or other requirements in this permit;

(4) For each emergency lasting one (1) hour or more, the Permittee notified IDEM, OAM, within four (4) daytime business hours after the beginning of the emergency, or after the emergency was discovered or reasonably should have been discovered;

Telephone Number: 1-800-451-6027 (ask for Office of Air Management, Compliance Section), or
Telephone Number: 317-233-5674 (ask for Compliance Section)
Facsimile Number: 317-233-5967

(5) For each emergency lasting one (1) hour or more, the Permittee submitted notice, either in writing or facsimile, of the emergency to:

Indiana Department of Environmental Management
Compliance Branch, Office of Air Management
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

within two (2) working days of the time when emission limitations were exceeded due to the emergency.

The notice fulfills the requirement of 326 IAC 2-7-5(3)(C)(ii) and must contain the following:

(A) A description of the emergency;

(B) Any steps taken to mitigate the emissions; and

(C) Corrective actions taken.

The notification which shall be submitted by the Permittee does not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

(6) The Permittee immediately took all reasonable steps to correct the emergency.

(c) In any enforcement proceeding, the Permittee seeking to establish the occurrence of an emergency has the burden of proof.

(d) This emergency provision supersedes 326 IAC 1-6 (Malfunctions) for sources subject to this rule after the effective date of this rule. This permit condition is in addition to any emergency or upset provision contained in any applicable requirement.

(e) IDEM, OAM may require that the Preventive Maintenance Plans required under 326 IAC 2-7-4-(c)(9) be revised in response to an emergency.

(f) Failure to notify IDEM, OAM by telephone or facsimile of an emergency lasting more than one (1) hour in compliance with (b)(4) and (5) of this condition shall constitute a violation of 326 IAC 2-7 and any other applicable rules.

(g) Operations may continue during an emergency only if the following conditions are met:

(1) If the emergency situation causes a deviation from a technology-based limit, the Permittee may continue to operate the affected emitting facilities during the emergency provided the Permittee immediately takes all reasonable steps to correct the emergency and minimize emissions.

(2) If an emergency situation causes a deviation from a health-based limit, the Permittee may not continue to operate the affected emissions facilities unless:

(A) The Permittee immediately takes all reasonable steps to correct the emergency situation and to minimize emissions; and

(B) Continued operation of the facilities is necessary to prevent imminent injury to persons, severe damage to equipment, substantial loss of capital investment, or loss of product or raw materials of substantial economic value.

Any operation shall continue no longer than the minimum time required to prevent the situations identified in (g)(2)(B) of this condition.

B.14 Permit Shield [326 IAC 2-7-15]

(a) This condition provides a permit shield as addressed in 326 IAC 2-7-15.

(b) This permit shall be used as the primary document for determining compliance with applicable requirements established by previously issued permits. Compliance with the conditions of this permit shall be deemed in compliance with any applicable requirements as of the date of permit issuance, provided that:

(1) The applicable requirements are included and specifically identified in this permit; or

(2) The permit contains an explicit determination or concise summary of a determination that other specifically identified requirements are not applicable.

(c) If, after issuance of this permit, it is determined that the permit is in nonconformance with an applicable requirement that applied to the source on the date of permit issuance, including any term or condition from a previously issued construction or operation permit, IDEM, OAM shall immediately take steps to reopen and revise this permit and issue a compliance order to the Permittee to ensure expeditious compliance with the applicable requirement until the permit is reissued. The permit shield shall continue in effect so long as the Permittee is in compliance with the compliance order.

(d) No permit shield shall apply to any permit term or condition that is determined after issuance of this permit to have been based on erroneous information supplied in the permit application.

(e) Nothing in 326 IAC 2-7-15 or in this permit shall alter or affect the following:

(1) The provisions of Section 303 of the Clean Air Act (emergency orders), including the authority of the U.S. EPA under Section 303 of the Clean Air Act;

(2) The liability of the Permittee for any violation of applicable requirements prior to or at the time of this permit's issuance;

(3) The applicable requirements of the acid rain program, consistent with Section 408(a) of the Clean Air Act; and

(4) The ability of U.S. EPA to obtain information from the Permittee under Section 114 of the Clean Air Act.

(f) This permit shield is not applicable to any change made under 326 IAC 2-7-20(b)(2) (Sections 502(b)(10) of the Clean Air Act changes) and 326 IAC 2-7-20(c)(2) (trading based on State Implementation Plan (SIP) provisions).

(g) This permit shield is not applicable to modifications eligible for group processing until after IDEM, OAM has issued the modifications. [326 IAC 2-7-12(c)(7)]

(h) This permit shield is not applicable to minor Part 70 permit modifications until after IDEM, OAM has issued the modification. [326 IAC 2-7-12(b)(8)]

B.15 Multiple Exceedances [326 IAC 2-7-5(1)(E)]

Any exceedance of a permit limitation or condition contained in this permit, which occurs contemporaneously with an exceedance of an associated surrogate or operating parameter established to detect or assure compliance with that limit or condition, both arising out of the same act or occurrence, shall constitute a single potential violation of this permit.

B.16 Deviations from Permit Requirements and Conditions [326 IAC 2-7-5(3)(C)(ii)]

(a) Deviations from any permit requirements (for emergencies see Section B - Emergency Provisions), the probable cause of such deviations, and any response steps or preventive measures taken shall be reported to:

Indiana Department of Environmental Management
Compliance Branch, Office of Air Management
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

within ten (10) calendar days from the date of the discovery of the deviation.

(b) A deviation is an exceedance of a permit limitation or a failure to comply with a requirement of the permit or a rule. It does not include:

(1) An excursion from compliance monitoring parameters as identified in Section D of this permit unless tied to an applicable rule or limit; or

(2) An emergency as defined in 326 IAC 2-7-1(12); or

(3) Failure to implement elements of the Preventive Maintenance Plan unless lack of maintenance has caused or contributed to a deviation.

(4) Failure to make or record information required by the compliance monitoring provisions of Section D unless such failure exceeds 5% of the required data in any calendar quarter.

A Permittee's failure to take the appropriate response step when an excursion of a compliance monitoring parameter has occurred is a deviation.

(c) Written notification shall be submitted on the attached Emergency/Deviation Occurrence Reporting Form or its substantial equivalent. The notification does not need to be certified by the "responsible official" as defined by 326 IAC 2-7-1(34).

(d) Proper notice submittal under 326 IAC 2-7-16 satisfies the requirement of this subsection.

B.17 Permit Modification, Reopening, Revocation and Reissuance, or Termination [326 IAC 2-7-5(6)(C)] [326 IAC 2-7-8(a)] [326 IAC 2-7-9]

(a) This permit may be modified, reopened, revoked and reissued, or terminated for cause. The filing of a request by the Permittee for a Part 70 permit modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any condition of this permit. [326 IAC 2-7-5(6)(C)]

(b) This permit shall be reopened and revised under any of the circumstances listed in IC 13-15-7-2 or if IDEM, OAM determines any of the following:

(1) That this permit contains a material mistake.

(2) That inaccurate statements were made in establishing the emissions standards or other terms or conditions.

(3) That this permit must be revised or revoked to assure compliance with an applicable requirement. [326 IAC 2-7-9(a)(3)]

(c) Proceedings by IDEM, OAM to reopen and revise this permit shall follow the same procedures as apply to initial permit issuance and shall affect only those parts of this permit for which cause to reopen exists. Such reopening and revision shall be made as expeditiously as practicable. [326 IAC 2-7-9(b)]

(d) The reopening and revision of this permit, under 326 IAC 2-7-9(a), shall not be initiated before notice of such intent is provided to the Permittee by IDEM, OAM at least thirty (30) days in advance of the date this permit is to be reopened, except that IDEM, OAM may provide a shorter time period in the case of an emergency. [326 IAC 2-7-9(c)]

B.18 Permit Renewal [326 IAC 2-7-4]

(a) The application for renewal shall be submitted using the application form or forms prescribed by IDEM, OAM and shall include the information specified in 326 IAC 2-7-4. Such information shall be included in the application for each emission unit at this source, except those emission units included on the trivial or insignificant activities list contained in 326 IAC 2-7-1(21) and 326 IAC 2-7-1(40).

Request for renewal shall be submitted to:

Indiana Department of Environmental Management
Permits Branch, Office of Air Management
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

(b) Timely Submittal of Permit Renewal [326 IAC 2-7-4(a)(1)(D)]

(1) A timely renewal application is one that is:

(A) Submitted at least nine (9) months prior to the date of the expiration of this permit; and

(B) If the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAM on or before the date it is due. [326 IAC 2-5-3]

(2) If IDEM, OAM, upon receiving a timely and complete permit application, fails to issue or deny the permit renewal prior to the expiration date of this permit, this existing permit shall not expire and all terms and conditions shall continue in effect, including any permit shield provided in 326 IAC 2-7-15, until the renewal permit has been issued or denied.

(c) Right to Operate After Application for Renewal [326 IAC 2-7-3]
If the Permittee submits a timely and complete application for renewal of this permit, the source's failure to have a permit is not a violation of 326 IAC 2-7 until IDEM, OAM takes final action on the renewal application, except that this protection shall cease to apply if, subsequent to the completeness determination, the Permittee fails to submit by the deadline specified in writing by IDEM, OAM, any additional information identified as being needed to process the application.

(d) United States Environmental Protection Agency Authority [326 IAC 2-7-8(e)]
If IDEM, OAM fails to act in a timely way on a Part 70 permit renewal, the U.S. EPA may invoke its authority under Section 505(e) of the Clean Air Act to terminate or revoke and reissue a Part 70 permit.

B.19 Permit Amendment or Modification [326 IAC 2-7-11] [326 IAC 2-7-12]

(a) The Permittee must comply with the requirements of 326 IAC 2-7-11 or 326 IAC 2-7-12 whenever the Permittee seeks to amend or modify this permit.

(b) Any application requesting an amendment or modification of this permit shall be submitted to:

Indiana Department of Environmental Management
Permits Branch, Office of Air Management
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

Any such application should be certified by the "responsible official" as defined by 326 IAC 2-7-1(34) only if a certification is required by the terms of the applicable rule.

(c) The Permittee may implement administrative amendment changes addressed in the request for an administrative amendment immediately upon submittal of the request. [326 IAC 2-7-11(c)(3)]

B.20 Permit Revision Under Economic Incentives and Other Programs [326 IAC 2-7-5(8)] [326 IAC 2-7-12 (b)(2)]

(a) No Part 70 permit revision shall be required under any approved economic incentives, marketable Part 70 permits, emissions trading, and other similar programs or processes for changes that are provided for in a Part 70 permit.

(b) Notwithstanding 326 IAC 2-7-12(b)(1)(D)(i) and 326 IAC 2-7-12(c)(1), minor Part 70 permit modification procedures may be used for Part 70 modifications involving the use of economic incentives, marketable Part 70 permits, emissions trading, and other similar approaches to the extent that such minor Part 70 permit modification procedures are explicitly provided for in the applicable State Implementation Plan (SIP) or in applicable requirements promulgated or approved by the U.S. EPA.

B.21 Changes Under Section 502(b)(10) of the Clean Air Act [326 IAC 2-7-20(b)]

The Permittee may make Section 502(b)(10) of the Clean Air Act changes (this term is defined at 326 IAC 2-7-1(36)) without a permit revision, subject to the constraint of 326 IAC 2-7-20(a) and the following additional conditions:

(a) For each such change, the required written notification shall include a brief description of the change within the source, the date on which the change will occur, any change in emissions, and any permit term or condition that is no longer applicable as a result of the change.

(b) The permit shield, described in 326 IAC 2-7-15, shall not apply to any change made under 326 IAC 2-7-20(b).

B.22 Operational Flexibility [326 IAC 2-7-20]

(a) The Permittee may make any change or changes at the source that are described in 326 IAC 2-7-20(b), (c), or (e), without a prior permit revision, if each of the following conditions is met:

(1) The changes are not modifications under any provision of Title I of the Clean Air Act;

(2) Any approval required by 326 IAC 2-1 has been obtained;

(3) The changes do not result in emissions which exceed the emissions allowable under this permit (whether expressed herein as a rate of emissions or in terms of total emissions);

(4) The Permittee notifies the:

Indiana Department of Environmental Management
Permits Branch, Office of Air Management
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

and

United States Environmental Protection Agency, Region V
Air and Radiation Division, Regulation Development Branch - Indiana (AR-18J)
77 West Jackson Boulevard
Chicago, Illinois 60604-3590

in advance of the change by written notification at least ten (10) days in advance of the proposed change. The Permittee shall attach every such notice to the Permittee's copy of this permit; and

(5) The Permittee maintains records on-site which document, on a rolling five (5) year basis, all such changes and emissions trading that are subject to 326 IAC 2-7-20(b), (c), or (e) and makes such records available, upon reasonable request, for public review.

Such records shall consist of all information required to be submitted to IDEM, OAM in the notices specified in 326 IAC 2-7-20(b), (c)(1), and (e)(2).

(b) For each such Section 502(b)(10) of the Clean Air Act change, the required written notification shall include the following:

(1) A brief description of the change within the source;

(2) The date on which the change will occur;

(3) Any change in emissions; and

(4) Any permit term or condition that is no longer applicable as a result of the change.

The notification which shall be submitted by the Permittee does not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

(c) Emission Trades [326 IAC 2-7-20(c)]
The Permittee may trade increases and decreases in emissions in the source, where the applicable SIP provides for such emission trades without requiring a permit revision, subject to the constraints of Section (a) of this condition and those in 326 IAC 2-7-20(c).

(d) Alternative Operating Scenarios [326 IAC 2-7-20(d)]
The Permittee may make changes at the source within the range of alternative operating scenarios that are described in the terms and conditions of this permit in accordance with 326 IAC 2-7-5(9). No prior notification of IDEM, OAM, or U.S. EPA is required.

(e) Backup fuel switches specifically addressed in, and limited under, Section D of this permit shall not be considered alternative operating scenarios. Therefore, the notification requirements of part (a) of this condition do not apply.

B.23 Construction Permit Requirement [326 IAC 2]

Except as allowed by Indiana P.L. 130-1996 Section 12, as amended by P.L. 244-1997, modification, construction, or reconstruction shall be approved as required by and in accordance with 326 IAC 2.

B.24 Inspection and Entry [326 IAC 2-7-6(2)]

Upon presentation of proper identification cards, credentials, and other documents as may be required by law, the Permittee shall allow IDEM, OAM, U.S. EPA, or an authorized representative to perform the following:

(a) Enter upon the Permittee's premises where a Part 70 source is located, or emissions related activity is conducted, or where records must be kept under the conditions of this permit;

(b) Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;

(c) Inspect, at reasonable times, any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit;

(d) Sample or monitor, at reasonable times, substances or parameters for the purpose of assuring compliance with this permit or applicable requirements; and

(e) Utilize any photographic, recording, testing, monitoring, or other equipment for the purpose of assuring compliance with this permit or applicable requirements. [326 IAC 2-7-6(6)]

(1) The Permittee may assert a claim that, in the opinion of the Permittee, information removed or about to be removed from the source by IDEM, OAM, or an authorized representative, contains information that is confidential under IC 5-14-3-4(a).

The claim shall be made in writing before or at the time the information is removed from the source. In the event that a claim of confidentiality is so asserted, neither IDEM, OAM, nor an authorized representative, may disclose the information unless and until IDEM, OAM makes a determination under 326 IAC 17-1-7 through 326 IAC 17-1-9 that the information is not entitled to confidential treatment and that determination becomes final. [IC 5-14-3-4; IC 13-14-11-3; 326 IAC 17-1-7 through 326 IAC 17-1-9]

(2) The Permittee, and IDEM, OAM acknowledge that the federal law applies to claims of confidentiality made by the Permittee with regard to information removed or about to be removed from the source by U.S. EPA. [40 CFR Part 2, Subpart B]

B.25 Transfer of Ownership or Operation [326 IAC 2-1-6] [326 IAC 2-7-11]

Pursuant to 326 IAC 2-1-6 and 326 IAC 2-7-11:

(a) In the event that ownership of this source is changed, the Permittee shall notify IDEM, OAM, Permits Branch, within thirty (30) days of the change. Notification shall include a written agreement containing a specific date for transfer of permit responsibility, coverage, and liability between the Permittee and the new owner.

(b) The written notification shall be sufficient to transfer the permit to the new owner by an administrative amendment pursuant to 326 IAC 2-7-11. The notification which shall be submitted by the Permittee does not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

(c) IDEM, OAM shall reserve the right to issue a new permit.

B.26 Annual Fee Payment [326 IAC 2-7-19] [326 IAC 2-7-5(7)]

(a) The Permittee shall pay annual fees to IDEM, OAM within thirty (30) calendar days of receipt of a billing. If the Permittee does not receive a bill from IDEM, OAM the applicable fee is due April 1 of each year.

(b) Failure to pay may result in administrative enforcement action, or revocation of this permit.

(c) The Permittee may call the following telephone numbers: 1-800-451-6027 or 317-233-0425 (ask for OAM, Technical Support and Modeling Section), to determine the appropriate permit fee.

B.27 Enhanced New Source Review [326 IAC 2]

The requirements of the construction permit rules in 326 IAC 2 are satisfied by this permit for any previously unpermitted facilities and facilities to be constructed within eighteen (18) months after the date of issuance of this permit, as listed in Sections A.2 and A.3.

SECTION C SOURCE OPERATION CONDITIONS

Entire Source

Emission Limitations and Standards [326 IAC 2-7-5(1)]

C.1 Major Source

Pursuant to 326 IAC 2-2 (Prevention of Significant Deterioration) and 40 CFR 52.21, this source is a major source.

C.2 Particulate Matter Emission Limitations For Processes with Process Weight Rates Less Than One Hundred (100) pounds per hour [326 IAC 6-3-2(c)]

Pursuant to 326 IAC 6-3-2(c), the allowable particulate matter emissions rate from any process not already regulated by 326 IAC 6-1 or any New Source Performance Standard, and which has a maximum process weight rate less than 100 pounds per hour shall not exceed 0.551 pounds per hour.

C.3 Opacity [326 IAC 5-1]

Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary Exemptions), opacity shall meet the following, unless otherwise stated in this permit:

(a) Opacity shall not exceed an average of forty percent (40%) in any one (1) six (6) minute averaging period, as determined in 326 IAC 5-1-4.

(b) Opacity shall not exceed sixty percent (60%) opacity for more than a cumulative total of fifteen (15) minutes (sixty (60) readings as measured according to 40 CFR 60, Appendix A, Method 9, or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor), in a six (6) hour period.

C.4 Open Burning [326 IAC 4-1] [IC 13-17-9]

The Permittee shall not open burn any material except as provided in 326 IAC 4-1-3, 326 IAC 4-1-4 or 326 IAC 4-1-6. The previous sentence notwithstanding, the Permittee may open burn in accordance with an open burning approval issued by the Commissioner under 326 IAC 4-1-4.1. 326 IAC 4-1-3 (a)(2)(A) and (B) are not federally enforceable.

C.5 Incineration [326 IAC 4-2][326 IAC 9-1-2]

The Permittee shall not operate an incinerator or incinerate any waste or refuse except as provided in 326 IAC 4-2 and 326 IAC 9-1-2.

C.6 Fugitive Dust Emissions [326 IAC 6-4]

The Permittee shall not allow fugitive dust to escape beyond the property line or boundaries of the property, right-of-way, or easement on which the source is located, in a manner that would violate 326 IAC 6-4 (Fugitive Dust Emissions). 326 IAC 6-4-2(4) is not federally enforceable.

C.7 Operation of Equipment [326 IAC 2-7-6(6)]

All air pollution control equipment listed in this permit and used to comply with an applicable requirement shall be operated at all times that the emission units vented to the control equipment are in operation.

C.8 Asbestos Abatement Projects [326 IAC 14-10] [326 IAC 18] [40 CFR 61.140]

(a) Notification requirements apply to each owner or operator. If the combined amount of regulated asbestos containing material (RACM) to be stripped, removed or disturbed is at least 260 linear feet on pipes or 160 square feet on other facility components, or at least thirty-five (35) cubic feet on all facility components, then the notification requirements of 326 IAC 14-10-3 are mandatory. All demolition projects require notification whether or not asbestos is present.

(b) The Permittee shall ensure that a written notification is sent on a form provided by the Commissioner at least ten (10) working days before asbestos stripping or removal work or before demolition begins, per 326 IAC 14-10-3, and shall update such notice as necessary, including, but not limited to the following:

(1) When the amount of affected asbestos containing material increases or decreases by at least twenty percent (20%); or

(2) If there is a change in the following:

(A) Asbestos removal or demolition start date;

(B) Removal or demolition contractor; or

(C) Waste disposal site.

(c) The Permittee shall ensure that the notice is postmarked or delivered according to the guidelines set forth in 326 IAC 14-10-3(2).

(d) The notice to be submitted shall include the information enumerated in 326 IAC 14-10-3(3).

All required notifications shall be submitted to:

Indiana Department of Environmental Management
Asbestos Section, Office of Air Management
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

The notifications do not require a certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

(e) Procedures for Asbestos Emission Control
The Permittee shall comply with the emission control procedures in 326 IAC 14-10-4 and 40 CFR 61.145(c). Per 326 IAC 14-10-4 emission control requirements are mandatory for any removal or disturbance of RACM greater than three (3) linear feet on pipes or three (3) square feet on any other facility components or a total of at least 0.75 cubic feet on all facility components.

(f) Indiana Accredited Asbestos Inspector
The Permittee shall comply with 326 IAC 14-10-1(a) that requires the owner or operator, prior to a renovation/demolition, to use an Indiana Accredited Asbestos Inspector to thoroughly inspect the affected portion of the facility for the presence of asbestos. The requirement that the inspector be accredited is federally enforceable.

Testing Requirements [326 IAC 2-7-6(1)]

C.9 Performance Testing [326 IAC 3-6]

(a) All testing shall be performed according to the provisions of 326 IAC 3-6 (Source Sampling Procedures), except as provided elsewhere in this permit, utilizing methods approved by IDEM, OAM.

A test protocol, except as provided elsewhere in this permit, shall be submitted to:

Indiana Department of Environmental Management
Compliance Data Section, Office of Air Management
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

no later than thirty-five (35) days prior to the intended test date. The Permittee shall submit a notice of the actual test date to the above address so that it is received at least two weeks prior to the test date.

(b) All test reports must be received by IDEM, OAM within forty-five (45) days after the completion of the testing. An extension may be granted by the Commissioner, if the source submits to IDEM, OAM, a reasonable written explanation within five (5) days prior to the end of the initial forty-five (45) day period.

The documentation submitted by the Permittee does not require certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

Compliance Monitoring Requirements [326 IAC 2-7-5(1)] [326 IAC 2-7-6(1)]

C.10 Compliance Schedule [326 IAC 2-7-6(3)]

The Permittee:

(a) Has certified that all facilities at this source are in compliance with all applicable requirements; and

(b) Has submitted a statement that the Permittee will continue to comply with such requirements; and

(c) Will comply with such applicable requirements that become effective during the term of this permit.

C.11 Compliance Monitoring [326 IAC 2-7-5(3)] [326 IAC 2-7-6(1)]

Compliance with applicable requirements shall be documented as required by this permit. The Permittee shall be responsible for installing any necessary equipment and initiating any required monitoring related to that equipment, no more than ninety (90) days after receipt of this permit. If due to circumstances beyond its control, this schedule cannot be met, the Permittee may extend compliance schedule an additional ninety (90) days provided the Permittee notifies:

Indiana Department of Environmental Management
Compliance Branch, Office of Air Management
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

in writing, prior to the end of the initial ninety (90) day compliance schedule, with full justification of the reasons for the inability to meet this date.

The notification which shall be submitted by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

C.12 Maintenance of Monitoring Equipment [326 IAC 2-7-5(3)(A)(iii)]

(a) In the event that a breakdown of the monitoring equipment occurs, a record shall be made of the times and reasons of the breakdown and efforts made to correct the problem. To the extent practicable, supplemental or intermittent monitoring of the parameter should be implemented at intervals no less frequent than required in Section D of this permit until such time as the monitoring equipment is back in operation. In the case of continuous monitoring, supplemental or intermittent monitoring of the parameter should be implemented at intervals no less than one (1) hour until such time as the continuous monitor is back in operation.

(b) The Permittee shall install, calibrate, quality assure, maintain, and operate all necessary monitors and related equipment. In addition, prompt corrective action shall be initiated whenever indicated.

C.13 Monitoring Methods [326 IAC 3]

Any monitoring or testing performed to meet the applicable requirements of this permit shall be performed according to the provisions of 326 IAC 3, 40 CFR 60, Appendix A, or other approved methods as specified in this permit.

C.14 Pressure Gauge Specifications

Whenever a condition in this permit requires the measurement of pressure drop across any part of the unit or its control device, the gauge employed shall have a scale such that the expected normal reading shall be no less than twenty percent (20%) of full scale and be accurate within plus or minus two percent (±2%) of full scale reading.

Corrective Actions and Response Steps [326 IAC 2-7-5] [326 IAC 2-7-6]

C.15 Emergency Reduction Plans [326 IAC 1-5-2] [326 IAC 1-5-3]

Pursuant to 326 IAC 1-5-2 (Emergency Reduction Plans; Submission):

(a) The Permittee prepared and submitted written emergency reduction plans (ERPs) consistent with safe operating procedures on September 16, 1996.

(b) If the ERP is disapproved by IDEM, OAM, the Permittee shall have an additional thirty (30) days to resolve the differences and submit an approvable ERP.

(c) These ERPs shall state those actions that will be taken, when each episode level is declared, to reduce or eliminate emissions of the appropriate air pollutants.

(d) Said ERPs shall also identify the sources of air pollutants, the approximate amount of reduction of the pollutants, and a brief description of the manner in which the reduction will be achieved.

(e) Upon direct notification by IDEM, OAM, that a specific air pollution episode level is in effect, the Permittee shall immediately put into effect the actions stipulated in the approved ERP for the appropriate episode level.
[326 IAC 1-5-3]

C.16 Risk Management Plan [326 IAC 2-7-5(12)] [40 CFR 68.215]

If a regulated substance, subject to 40 CFR 68, is present in a process in more than the threshold quantity, 40 CFR 68 is an applicable requirement and the Permittee shall:

(a) Submit:

(1) A compliance schedule for meeting the requirements of 40 CFR 68 by the date provided in 40 CFR 68.10(a); or

(2) As a part of the compliance certification submitted under 326 IAC 2-7-6(5), a certification statement that the source is in compliance with all the requirements of 40 CFR 68, including the registration and submission of a Risk Management Plan (RMP); and

(3) A verification to IDEM, OAM that a RMP or a revised plan was prepared and submitted as required by 40 CFR 68.

(b) Provide annual certification to IDEM, OAM that the Risk Management Plan is being properly implemented.

All documents submitted pursuant to this condition shall include the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

C.17 Compliance Monitoring Plan - Failure to Take Response Steps [326 IAC 2-7-5][326 IAC 2-7-6] [326 IAC 1-6]

(a) The Permittee is required to implement a compliance monitoring plan to ensure that reasonable information is available to evaluate its continuous compliance with applicable requirements. This compliance monitoring plan is comprised of:

(1) This condition;

(2) The Compliance Determination Requirements in Section D of this permit;

(3) The Compliance Monitoring Requirements in Section D of this permit;

(4) The Record Keeping and Reporting Requirements in Section C (Monitoring Data Availability, General Record Keeping Requirements, and General Reporting Requirements) and in Section D of this permit; and

(5) A Compliance Response Plan (CRP) for each compliance monitoring condition of this permit. CRP's shall be submitted to IDEM, OAM upon request and shall be subject to review and approval by IDEM, OAM. The CRP shall be prepared within ninety (90) days after issuance of this permit by the Permittee and maintained on site, and is comprised of :

(A) Response steps that will be implemented in the event that compliance related information indicates that a response step is needed pursuant to the requirements of Section D of this permit; and

(B) A time schedule for taking such response steps including a schedule for devising additional response steps for situations that may not have been predicted.

(b) For each compliance monitoring condition of this permit, appropriate response steps shall be taken when indicated by the provisions of that compliance monitoring condition. Failure to perform the actions detailed in the compliance monitoring conditions or failure to take the response steps within the time prescribed in the Compliance Response Plan, shall constitute a violation of the permit unless taking the response steps set forth in the Compliance Response Plan would be unreasonable.

(c) After investigating the reason for the excursion, the Permittee is excused from taking further response steps for any of the following reasons:

(1) The monitoring equipment malfunctioned, giving a false reading. This shall be an excuse from taking further response steps providing that prompt action was taken to correct the monitoring equipment.

(2) The Permittee has determined that the compliance monitoring parameters established in the permit conditions are technically inappropriate, has previously submitted a request for an administrative amendment to the permit, and such request has not been denied or;

(3) An automatic measurement was taken when the process was not operating; or

(4) The process has already returned to operating within "normal" parameters and no response steps are required.

(d) Records shall be kept of all instances in which the compliance related information was not met and of all response steps taken. In the event of an emergency, the provisions of 326 IAC 2-7-16 (Emergency Provisions) requiring prompt corrective action to mitigate emissions shall prevail.

C.18 Actions Related to Noncompliance Demonstrated by a Stack Test [326 IAC 2-7-5] [326 IAC 2-7-6]

(a) When the results of a stack test performed in conformance with Section C - Performance Testing, of this permit exceed the level specified in any condition of this permit, the Permittee shall take appropriate corrective actions. The Permittee shall submit a description of these corrective actions to IDEM, OAM, within thirty (30) days of receipt of the test results. The Permittee shall take appropriate action to minimize emissions from the affected facility while the corrective actions are being implemented. IDEM, OAM shall notify the Permittee within thirty (30) days, if the corrective actions taken are deficient. The Permittee shall submit a description of additional corrective actions taken to IDEM, OAM within thirty (30) days of receipt of the notice of deficiency. IDEM, OAM reserves the authority to use enforcement activities to resolve noncompliant stack tests.

(b) A retest to demonstrate compliance shall be performed within one hundred twenty (120) days of receipt of the original test results. Should the Permittee demonstrate to IDEM, OAM that retesting in one-hundred and twenty (120) days is not practicable, IDEM, OAM may extend the retesting deadline. Failure of the second test to demonstrate compliance with the appropriate permit conditions may be grounds for immediate revocation of the permit to operate the affected facility.

The documents submitted pursuant to this condition do not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

C.19 Emission Statement [326 IAC 2-7-5(3)(C)(iii)][326 IAC 2-7-5(7)][326 IAC 2-7-19(c)][326 IAC 2-6]

(a) The Permittee shall submit an annual emission statement certified pursuant to the requirements of 326 IAC 2-6, that must be received by April 15 of each year and must comply with the minimum requirements specified in 326 IAC 2-6-4. The annual emission statement shall meet the following requirements:

(1) Indicate actual emissions of criteria pollutants from the source, in compliance with 326 IAC 2-6 (Emission Reporting);

(2) Indicate actual emissions of other regulated pollutants from the source, for purposes of Part 70 fee assessment.

(b) The annual emission statement covers the twelve (12) consecutive month time period starting December 1 and ending November 30. The annual emission statement must be submitted to:

Indiana Department of Environmental Management
Technical Support and Modeling Section, Office of Air Management
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

(c) The annual emission statement required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAM on or before the date it is due.

C.20 Monitoring Data Availability [326 IAC 2-7-6(1)] [326 IAC 2-7-5(3)]

(a) With the exception of performance tests conducted in accordance with Section C-Performance Testing, all observations, sampling, maintenance procedures, and record keeping, required as a condition of this permit shall be performed at all times the equipment is operating at normal representative conditions.

(b) As an alternative to the observations, sampling, maintenance procedures, and record keeping of subsection (a) above, when the equipment listed in Section D of this permit is not operating, the Permittee shall either record the fact that the equipment is shut down or perform the observations, sampling, maintenance procedures, and record keeping that would otherwise be required by this permit.

(c) If the equipment is operating but abnormal conditions prevail, additional observations and sampling should be taken with a record made of the nature of the abnormality.

(d) If for reasons beyond its control, the operator fails to make required observations, sampling, maintenance procedures, or record keeping, reasons for this must be recorded.

(e) At its discretion, IDEM may excuse such failure providing adequate justification is documented and such failures do not exceed five percent (5%) of the operating time in any quarter.

(f) Temporary, unscheduled unavailability of staff qualified to perform the required observations, sampling, maintenance procedures, or record keeping shall be considered a valid reason for failure to perform the requirements stated in (a) above.

C.21 General Record Keeping Requirements [326 IAC 2-7-5(3)][326 IAC 2-7-6]

(a) Records of all required monitoring data and support information shall be retained for a period of at least five (5) years from the date of monitoring sample, measurement, report, or application. These records shall be kept at the source location for a minimum of three (3) years and available upon the request of an IDEM, OAM representative. The records may be stored elsewhere for the remaining two (2) years as long as they are available upon request. If the Commissioner makes a written request for records to the Permittee, the Permittee shall furnish the records to the Commissioner within a reasonable time.

(b) Records of required monitoring information shall include, where applicable:

(1) The date, place, and time of sampling or measurements;

(2) The dates analyses were performed;

(3) The company or entity performing the analyses;

(4) The analytic techniques or methods used;

(5) The results of such analyses; and

(6) The operating conditions existing at the time of sampling or measurement.

(c) Support information shall include, where applicable:

(1) Copies of all reports required by this permit;

(2) All original strip chart recordings for continuous monitoring instrumentation;

(3) All calibration and maintenance records;

(4) Records of preventive maintenance shall be sufficient to demonstrate that improper maintenance did not cause or contribute to a violation of any limitation on emissions or potential to emit. To be relied upon subsequent to any such violation, these records may include, but are not limited to: work orders, parts inventories, and operator's standard operating procedures. Records of response steps taken shall indicate whether the response steps were performed in accordance with the Compliance Response Plan required by Section C - Compliance Monitoring Plan - Failure to take Response Steps, of this permit, and whether a deviation from a permit condition was reported. All records shall briefly describe what maintenance and response steps were taken and indicate who performed the tasks.

(d) All record keeping requirements not already legally required shall be implemented within ninety (90) days of permit issuance.

C.22 General Reporting Requirements [326 IAC 2-7-5(3)(C)]

(a) To affirm that the source has met all the compliance monitoring requirements stated in this permit the source shall submit a Quarterly Compliance Monitoring Report. Any deviation from the requirements and the date(s) of each deviation must be reported.

(b) The report required in (a) of this condition and reports required by conditions in Section D of this permit shall be submitted to:

Indiana Department of Environmental Management
Compliance Data Section, Office of Air Management
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

(c) Unless otherwise specified in this permit, any notice, report, or other submission required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAM on or before the date it is due.

(d) Unless otherwise specified in this permit, any quarterly report shall be submitted within thirty (30) days of the end of the reporting period.

(e) All instances of deviations as described in Section B- Deviations from Permit Requirements Conditions must be clearly identified in such reports.

(f) Any corrective actions or response steps taken as a result of each deviation must be clearly identified in such reports.

(g) The first report shall cover the period commencing on the date of issuance of this permit and ending on the last day of the reporting period.

The documents submitted pursuant to this condition do not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

Stratospheric Ozone Protection

C.23 Compliance with 40 CFR 82 and 326 IAC 22-1

Pursuant to 40 CFR 82 (Protection of Stratospheric Ozone), Subpart F, except as provided for motor vehicle air conditioners in Subpart B, the Permittee shall comply with the standards for recycling and emissions reduction:

(a) Persons opening appliances for maintenance, service, repair, or disposal must comply with the required practices pursuant to 40 CFR 82.156.

(b) Equipment used during the maintenance, service, repair, or disposal of appliances must comply with the standards for recycling and recovery equipment pursuant to 40 CFR 82.158.

(c) Persons performing maintenance, service, repair, or disposal of appliances must be certified by an approved technician certification program pursuant to 40 CFR 82.161.

SECTION D.1 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]

(a) One (1) melting and combustion operation (Unit 001) consisting of one (1) reverberatory furnace A processing aluminum at a maximum rate of 4.75 tons per hour, rated at 9.1 million (MM) British thermal units (Btu) per hour, combusting natural gas, and exhausting to one (1) stack (Stack 001);

(b) One (1) melting and combustion operation (Unit 002) consisting of one (1) reverberatory furnace B processing aluminum at a maximum rate of 4.75 tons per hour, rated at 9.1 MMBtu per hour, combusting natural gas, and exhausting to one (1) stack (Stack 001);

(c) One (1) melting and combustion operation (Unit 020) consisting of one (1) reverberatory furnace C processing aluminum at a maximum rate of 6.0 tons per hour, rated at 22.8 MMBtu per hour, combusting natural gas, and exhausting to one (1) stack (Stack 020);

(d) One (1) melting and combustion operation (Unit 021) consisting of one (1) reverberatory furnace D processing aluminum at a maximum rate of 6.0 tons per hour, rated at 22.8 MMBtu per hour, combusting natural gas, and exhausting to one (1) stack (Stack 021); and

(e) One (1) melting and combustion operation (Unit 022) consisting of one (1) reverberatory furnace E processing aluminum at a maximum rate of 3.0 tons per hour, rated at 20.4 million MMBtu per hour, combusting natural gas, and exhausting to one (1) stack (Stack 022).

Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.1.1 PSD Minor Limit [326 IAC 2-2] [40 CFR 52.21]

The total metal throughput to reverberatory furnaces A and B in the melting and combustion operations (Units 001 and 002) shall be limited to 41,610 tons per twelve (12) consecutive month period. This metal throughput limitation is required to limit the potential to emit of PM to 21.3 tons per twelve (12) consecutive month period, and to limit the potential to emit of VOC to 4.4 tons per twelve (12) consecutive month period. Compliance with this limit makes 326 IAC 2-2 (Prevention of Significant Deterioration) and 40 CFR 52.21 not applicable.

D.1.2 Particulate Matter (PM) [326 IAC 6-3-2(c)]

(a) Pursuant to 326 IAC 6-3 (Process Operations), the allowable PM emission rate from reverberatory furnaces A and B shall not exceed 18.5 pounds per hour when operating at a total process weight rate of 19,000 pounds per hour.

(b) Pursuant to 326 IAC 6-3 (Process Operations), the allowable PM emission rate from each of reverberatory furnaces C and D shall not exceed 13.6 pounds per hour when each is operating at a process weight rate of 12,000 pounds per hour.

(c) Pursuant to 326 IAC 6-3 (Process Operations), the allowable PM emission rate from reverberatory furnace E shall not exceed 8.6 pounds per hour when operating at a process weight rate of 6,000 pounds per hour.

The above pounds per hour limitations were calculated with the following equation:

$E = 4.10\ P^{0.67}$ where E = rate of emission in pounds per hour; and
P = process weight rate in tons per hour

D.1.3 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for reverberatory furnaces A and B in the melting and combustion operations (Units 001 and 002) and any control devices.

Compliance Determination Requirements

D.1.4 Testing Requirements [326 IAC 2-7-6(1),(6)]

During the period between 12 and 24 months after issuance of this permit, the Permittee shall perform PM and PM-10 testing on one (1) of reverberatory furnaces C and D utilizing Methods 5 or 17 (40 CFR 60, Appendix A) for PM and Methods 201 or 201A and 202 (40 CFR 51, Appendix M) for PM-10, or other methods as approved by the Commissioner. This test shall be repeated at least once every five (5) years from the date of this valid compliance demonstration. PM-10 includes filterable and condensible PM-10. In addition to these requirements, IDEM may require compliance testing when necessary to determine if the facility is in compliance.

Compliance Monitoring Requirements [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

D.1.5 Visible Emissions Notations

(a) Daily visible emission notations of the reverberatory furnaces A, B, C, D, and E stack exhausts shall be performed during normal daylight operations when exhausting to the atmosphere. A trained employee shall record whether emissions are normal or abnormal.

(b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.

(c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.

(d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.

(e) The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when an abnormal emission is observed.

Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

D.1.6 Record Keeping Requirements

(a) To document compliance with Condition D.1.1, the Permittee shall maintain records in accordance with (1) through (3) below. Records maintained for (1) through (3) shall be taken monthly and shall be complete and sufficient to establish compliance with the metal throughput limit and the VOC and PM emission limits established in Condition D.1.1.

(1) The total monthly metal throughput to reverberatory furnaces A and B.

(2) The total VOC emissions from reverberatory furnaces A and B per month; and

(3) The total PM emissions from reverberatory furnaces A and B per month.

(b) To document compliance with Condition D.1.5, the Permittee shall maintain records of daily visible emission notations of the reverberatory furnaces A, B, C, D, and E stack exhausts.

(c) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

D.1.7 Reporting Requirements

A quarterly summary of the information to document compliance with Condition D.1.1 shall be submitted to the address listed in Section C - General Reporting Requirements, of this permit, using the reporting forms located at the end of this permit, or their equivalent, within thirty (30) days after the end of the quarter being reported.

SECTION D.2 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]

(f) One (1) semi-permanent molding operation (Unit 100) consisting of one (1) semi-permanent turntable and six (6) casting machines with molds sent to a casting monorail, processing aluminum at a maximum rate of 2.0 tons per hour, and exhausting through three (3) roof exhaust fans (Stacks 100a, 100b, and 100c);

(g) One (1) semi-permanent molding operation (Unit 101) consisting of one (1) semi-permanent turntable and six (6) casting machines with molds sent to a casting monorail, processing aluminum at a maximum rate of 2.0 tons per hour, and exhausting to four (4) roof exhaust fans (Stacks 101a, 101b, 101c, and 101d);

(h) One (1) semi-permanent molding operation (Unit 102) consisting of one (1) semi-permanent turntable and six (6) casting machines with molds sent to a casting monorail, processing aluminum at a maximum rate of 2.0 tons per hour, and exhausting to four (4) roof exhaust fans (Stacks 102a, 102b, 102c, and 102d); and

(i) One (1) semi-permanent molding operation (Unit 103) consisting of one (1) prototype semi-permanent mold turntable (operation is not necessarily performed on any particular turntable) and six (6) available casting machines (operations are performed on individual casting machines) with molds sent to a casting monorail, processing aluminum at a maximum rate of 0.5 tons per hour, and exhausting to the general plant atmosphere.

Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.2.1 PSD Minor Limit [326 IAC 2-2] [40 CFR 52.21]

The total metal throughput to the four (4) semi-permanent molding operations (Units 100-103) shall be limited to 28,470 tons per twelve (12) consecutive month period. This metal throughput limitation is required to limit the potential to emit of PM to 3.7 tons per twelve (12) consecutive month period, and to limit the potential to emit of VOC to 24.3 tons per twelve (12) consecutive month period. Compliance with this limit makes 326 IAC 2-2 (Prevention of Significant Deterioration) and 40 CFR 52.21 not applicable.

D.2.2 Particulate Matter (PM) [326 IAC 6-3-2(c)]

(a) Pursuant to 326 IAC 6-3 (Process Operations), the allowable PM emission rate from each of the three (3) semi-permanent mold making operations (Units 100-102) shall not exceed 6.5 pounds per hour when each is operating at a total process weight rate of 4,000 pounds per hour.

(b) Pursuant to 326 IAC 6-3 (Process Operations), the allowable PM emission rate from the prototype semi-permanent mold making operation (Unit 103) shall not exceed 2.6 pounds per hour when operating at a total process weight rate of 1,000 pounds per hour.

The above pounds per hour limitations were calculated with the following equation:

$E = 4.10 P^{0.67}$ where E = rate of emission in pounds per hour; and
P = process weight rate in tons per hour

D.2.3 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for this facility and any control device.

Compliance Determination Requirements

D.2.4 Testing Requirements [326 IAC 2-7-6(1),(6)]

During the period between 12 and 24 months after issuance of this permit, the Permittee shall perform PM, PM-10, and VOC testing on one (1) of the three (3) semi-permanent molding operations (Units 100 - 102), utilizing Methods 5 or 17 (40 CFR 60, Appendix A) for PM, Methods 201 or 201A and 202 (40 CFR 51, Appendix M) for PM-10, or other methods as approved by the Commissioner for PM and PM-10 and methods as approved by the Commissioner for VOC. This test shall be repeated at least once every five (5) years from the date of this valid compliance demonstration. PM-10 includes filterable and condensible PM-10. In addition to these requirements, IDEM may require compliance testing when necessary to determine if the facility is in compliance.

Compliance Monitoring Requirements [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

D.2.5 Visible Emissions Notations

(a) Daily visible emission notations of the three (3) semi-permanent molding operations (Units 100, 101, and 102) roof fan exhausts shall be performed during normal daylight operations when exhausting to the atmosphere. A trained employee shall record whether emissions are normal or abnormal.

(b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.

(c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.

(d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.

(e) The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when an abnormal emission is observed.

Record Keeping and Reporting Requirement [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

D.2.6 Record Keeping Requirements

(a) To document compliance with Condition D.2.1, the Permittee shall maintain records in accordance with (1) through (3) below. Records maintained for (1) through (3) shall be taken monthly and shall be complete and sufficient to establish compliance with the metal throughput limit and the VOC and PM emission limits established in Condition D.2.1.

(1) The total monthly metal throughput to the four (4) semi-permanent molding operations (Units 100-103);

(2) The total VOC emissions from the four (4) semi-permanent molding operations (Units 100-103) per month; and

(3) The total PM emissions from the four (4) semi-permanent molding operations (Units 100-103) per month.

(b) To document compliance with Condition D.2.5, the Permittee shall maintain records of daily visible emission notations of the three (3) semi-permanent molding operations (Units 100, 101, and 102) roof fan exhausts.

(c) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

D.2.7 Reporting Requirements

A quarterly summary of the information to document compliance with Condition D.2.1 shall be submitted to the address listed in Section C - General Reporting Requirements, of this permit, using the reporting forms located at the end of this permit, or their equivalent, within thirty (30) days after the end of the quarter being reported.

SECTION D.3 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]

(j) One (1) core making operation (Unit 200) consisting of five (5) sand silos, three (3) sand heaters, four (4) sand mixers, eight (8) core machines, and storage racks, processing sand and resin with a maximum sand process rate of 4.5 tons per hour, with one (1) dust collector (DC-1) on sand silos #3 and #4 for particulate control which exhausts through one (1) stack (Stack 200a), and eight (8) acid scrubbers on the core machines for VOC control which exhaust through five (5) stacks (Stacks 200b through 200f); and

(k) One (1) prototype core making operation (Unit 210) consisting of one (1) sand silo, one (1) sand mixer, and storage racks, processing sand and resin with a maximum sand process rate of 0.25 tons per hour. This operation is portable and can utilize sand from any of the five sand silos in the core making operation (Unit 200).

Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.3.1 PSD Minor Limit [326 IAC 2-2] [40 CFR 52.21]

Total VOC usage (not including the triethylamine (TEA) Catalyst) in the core making operation (Unit 200) shall be limited such that fugitive VOC emissions (not including TEA emissions) are limited to less than 40 tons per twelve (12) consecutive month period. Emissions of TEA from the TEA catalyst usage shall be controlled by the eight (8) acid scrubbers and shall not exceed 8.14 tons per year after control. Compliance with this limit makes 326 IAC 2-2 (Prevention of Significant Deterioration) and 40 CFR 52.21 not applicable.

D.3.2 Volatile Organic Compounds (VOC) [326 IAC 8-1-6]

Pursuant to 326 IAC 8-1-6 (New Facilities, General Reduction Requirements), the Best Available Control Technology (BACT) for the core making operation (Unit 200) shall be the following:

(a) The eight (8) sulfuric acid scrubbers controlling the eight (8) core machines will continue to be operated in an efficient manner to control TEA emissions. The scrubbers shall operate at an overall control efficiency of 90.25%. Potential emissions of TEA after control shall not exceed 8.14 tons per year.

(b) To minimize the other VOC emissions from the core making operation, efficient sand/resin mixing systems will be utilized to minimize overrun wastage and resin use, and controlled measurement techniques will be used to verify that the mixes are maintained within tight limits and excessive binder use will not occur.

D.3.3 Particulate Matter (PM) [326 IAC 6-3-2(c)]

(a) Pursuant to 326 IAC 6-3 (Process Operations), the allowable PM emission rate from the sand handling and the sand silos in the core making operations (Unit 200) shall not exceed 11.2 pounds per hour when operating at a process weight rate of 9,000 pounds per hour.

(b) Pursuant to 326 IAC 6-3 (Process Operations), the allowable PM emission rate from the sand handling and sand silos associated with the prototype core making operation (Unit 210) shall not exceed 1.6 pounds per hour when operating at a process weight rate of 500 pounds per hour.

The above pounds per hour limitations were calculated with the following equation:

$E = 4.10\ P^{0.67}$ where E = rate of emission in pounds per hour; and P = process weight rate in tons per hour

D.3.4 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for this facility and its control device.

Compliance Determination Requirements

D.3.5 Testing Requirements [326 IAC 2-7-6(1),(6)]

The Permittee is not required to test this facility by this permit. However, IDEM may require compliance testing at any specific time when necessary to determine if the facility is in compliance. If testing is required by IDEM, compliance with the VOC and PM limits specified in Conditions D.3.1, D.3.2, and D.3.3 shall be determined by a performance test conducted in accordance with Section C - Performance Testing.

D.3.6 Particulate Matter (PM) and Volatile Organic Compounds (VOC)

The baghouse for PM control shall be in operation at all times when the sand silos #3 and #4 are in operation and exhausting to the outside atmosphere. The eight (8) wet scrubbers controlling TEA emissions shall be in operation at all times when the eight (8) core machines are in operation.

Compliance Monitoring Requirements [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

D.3.7 Visible Emissions Notations

(a) Daily visible emission notations of the baghouse stack exhaust shall be performed during normal daylight operations when exhausting to the atmosphere. A trained employee shall record whether emissions are normal or abnormal.

(b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.

(c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.

(d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.

(e) The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when an abnormal emission is observed.

D.3.8 Parametric Monitoring

The Permittee shall record the pH of the liquid in each of the eight (8) acid scrubbers used in conjunction with the core machines, at least once daily when the core machines are in operation. Unless operated under conditions for which the Compliance Response Plan specifies otherwise, the pH of the liquid shall be maintained at less than or equal to 5.0 standard units. The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when the pH is greater than the above mentioned range for any one reading.

D.3.9 Baghouse Inspections

An inspection shall be performed each calender quarter of all bags controlling sand silos #3 and #4 in the core making process when venting to the outside atmosphere. A baghouse inspection shall be performed within three months of redirected vents to the atmosphere and every three months thereafter. Inspections are optional when venting indoors. All defective bags shall be replaced.

D.3.10 Broken or Failed Bag Detection

In the event that bag failure has been observed.

(a) The affected compartments will be shut down immediately until the failed units have been repaired or replaced. Within eight (8) hours of the determination of failure, response steps according to the timetable described in the Compliance Response Plan shall be initiated. For any failure with corresponding response steps and timetable not described in the Compliance Response Plan, response steps shall be devised within eight (8) hours of discovery of the failure and shall include a timetable for completion. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).

(b) For single compartment baghouses, failed units and the associated process will be shut down immediately until the failed units have been repaired or replaced. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).

Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

D.3.11 Record Keeping Requirements

(a) To document compliance with Condition D.3.1, the Permittee shall maintain records of the total VOC usage (including the TEA Catalyst) and associated VOC emissions from the core making operation (Unit 200) per month;

(b) To document compliance with Condition D.3.7, the Permittee shall maintain records of daily visible emission notations of the baghouse stack exhaust.

(c) To document compliance with Condition D.3.8, the Permittee shall maintain the following:

(1) Daily records of the following operational parameters during normal operation when venting to the atmosphere:

(A) pH of the liquid in the eight (8) acid scrubbers.

(2) Documentation of all response steps implemented, per event .

(3) Operation and preventive maintenance logs, including work purchases orders, shall be maintained.

(4) Quality Assurance/Quality Control (QA/QC) procedures or its equivalent.

(5) Operator standard operating procedures (SOP) or its equivalent.

(6) Manufacturer's specifications or its equivalent.

(7) Equipment "troubleshooting" contingency plan.

(8) Documentation of the dates vents are redirected.

(d) To document compliance with Condition D.3.9, the Permittee shall maintain records of the results of the inspections required under Condition D.3.9.

(e) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

D.3.12 Reporting Requirements

A quarterly summary of the information to document compliance with Condition D.3.1 shall be submitted to the address listed in Section C - General Reporting Requirements, of this permit, using the reporting forms located at the end of this permit, or their equivalent, within thirty (30) days after the end of the quarter being reported.

SECTION D.4 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]

(l) One (1) core removal operation (Unit 230) consisting of a core knockout room with multiple automatic knockout hammers, with a maximum sand throughput of 4.75 tons per hour, exhausting to two (2) stacks (Stacks 230 a-b).

Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.4.1 PSD Minor Limit [326 IAC 2-2] [40 CFR 52.21]

The total sand throughput to the core removal operation (Unit 230) shall be limited to 20,808 tons per twelve (12) consecutive month period. This sand throughput limitation is required to limit the potential to emit of PM to 20.8 tons per twelve (12) consecutive month period, and to limit the potential to emit of VOC to 12.5 tons per twelve (12) consecutive month period. Compliance with this limit makes 326 IAC 2-2 (Prevention of Significant Deterioration) and 40 CFR 52.21 not applicable.

D.4.2 Particulate Matter (PM) [326 IAC 6-3-2(c)]

Pursuant to 326 IAC 6-3 (Process Operations), the allowable PM emission rate from the core removal operation (Unit 230) shall not exceed 11.6 pounds per hour when operating at a process weight rate of 9,500 pounds per hour.

The pounds per hour limitation was calculated with the following equation:

$E = 4.10\ P^{0.67}$ where E = rate of emission in pounds per hour; and

P = process weight rate in tons per hour

D.4.3 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for this facility and any control device.

Compliance Determination Requirements

D.4.4 Testing Requirements [326 IAC 2-7-6(1)]

During the period between 12 and 24 months after issuance of this permit, the Permittee shall perform PM and PM-10 testing utilizing Methods 5 or 17 (40 CFR 60, Appendix A) for PM and Methods 201 or 201A and 202 (40 CFR 51, Appendix M) for PM-10, or other methods as approved by the Commissioner. This test shall be repeated at least once every five (5) years from the date of this valid compliance demonstration. PM-10 includes filterable and condensible PM-10. In addition to these requirements, IDEM may require compliance testing when necessary to determine if the facility is in compliance.

Compliance Monitoring Requirements [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

D.4.5 Visible Emissions Notations

(a) Daily visible emission notations of the core removal operation stack exhausts shall be performed during normal daylight operations when exhausting to the atmosphere. A trained employee shall record whether emissions are normal or abnormal.

(b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.

(c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.

(d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.

(e) The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when an abnormal emission is observed.

Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

D.4.6 Record Keeping Requirements

(a) To document compliance with Condition D.4.1, the Permittee shall maintain records in accordance with (1) through (3) below. Records maintained for (1) through (3) shall be taken monthly and shall be complete and sufficient to establish compliance with the sand throughput limit and the VOC and PM emission limits established in Condition D.4.1.

(1) The total monthly sand throughput to the core removal operation (Unit 230);

(2) The total VOC emissions from the core removal operation (Unit 230) per month; and

(3) The total PM emissions from the core removal operation (Unit 230) per month.

(b) To document compliance with Condition D.4.5, the Permittee shall maintain records of daily visible emission notations of the core removal operation stack exhausts.

(c) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

D.4.7 Reporting Requirements

A quarterly summary of the information to document compliance with Condition D.4.1 shall be submitted to the address listed in Section C - General Reporting Requirements, using the reporting forms located at the end of this permit, or their equivalent, within thirty (30) days after the end of the quarter being reported.

SECTION D.5 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]

(m) One (1) mold blasting room (Unit 350) with a maximum capacity of 31.2 tons of steel molds per hour and 3 tons of blasting material per hour, controlled by a baghouse, with emissions exhausting through one (1) stack (Stack 350).

Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.5.1 PSD Minor Limit [326 IAC 2-2] [40 CFR 52.21]

Emissions of PM and PM-10 from the mold blasting room (Unit 350) shall be limited to 24 and 14 tons per year, respectively, to avoid the requirements of 326 IAC 2-2 (PSD).

D.5.2 Particulate Matter (PM) [326 IAC 6-3-2(c)]

Pursuant to 326 IAC 6-3 (Process Operations), the allowable PM emission rate from the shotblast machine (Unit 350) shall not exceed 40.3 pounds per hour when operating at a process weight rate of 62,400 pounds per hour.

The pounds per hour limitation was calculated with the following equation:

$E = 55.0\ P^{0.11} - 40$ where E = rate of emission in pounds per hour; and P = process weight rate in tons per hour

D.5.3 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for this facility and its control device.

Compliance Determination Requirements

D.5.4 Testing Requirements [326 IAC 2-7-6(1),(6)]

The Permittee is not required to test this facility by this permit. However, IDEM may require compliance testing at any specific time when necessary to determine if the facility is in compliance. If testing is required by IDEM, compliance with the PM and PM-10 limits specified in Conditions D.5.1 and D.5.2 shall be determined by a performance test conducted in accordance with Section C - Performance Testing.

D.5.5 Particulate Matter (PM)

The baghouse for PM control shall be in operation at all times when the shotblast machine is in operation and exhausting to the outside atmosphere.

Compliance Monitoring Requirements [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

D.5.6 Visible Emissions Notations

(a) Daily visible emission notations of the baghouse stack exhaust shall be performed during normal daylight operations when exhausting to the atmosphere. A trained employee shall record whether emissions are normal or abnormal.

(b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.

(c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.

(d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.

(e) The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when an abnormal emission is observed.

D.5.7 Parametric Monitoring

The Permittee shall record the total static pressure drop across the baghouse used in conjunction with the shotblast machine, at least once daily when the shotblast machine is in operation when venting to the atmosphere. Unless operated under conditions for which the Compliance Response Plan specifies otherwise, the pressure drop across the baghouse shall be maintained within the range of 1.0 and 6.0 inches of water or a range established during the latest stack test. The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when the pressure reading is outside of the above mentioned range for any one reading.

The instrument used for determining the pressure shall comply with Section C - Pressure Gauge Specifications, of this permit, shall be subject to approval by IDEM, OAM, and shall be calibrated at least once every six (6) months.

D.5.8 Baghouse Inspections

An inspection shall be performed each calender quarter of all bags controlling shotblast machine when venting to the outside atmosphere. A baghouse inspection shall be performed within three months of redirected vents to the atmosphere and every three months thereafter. Inspections are optional when venting indoors. All defective bags shall be replaced.

D.5.9 Broken or Failed Bag Detection

In the event that bag failure has been observed.

(a) The affected compartments will be shut down immediately until the failed units have been repaired or replaced. Within eight (8) hours of the determination of failure, response steps according to the timetable described in the Compliance Response Plan shall be initiated. For any failure with corresponding response steps and timetable not described in the Compliance Response Plan, response steps shall be devised within eight (8) hours of discovery of the failure and shall include a timetable for completion. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).

(b) For single compartment baghouses, failed units and the associated process will be shut down immediately until the failed units have been repaired or replaced. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).

Record Keeping and Reporting Requirement [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

D.5.10 Record Keeping Requirements

(a) To document compliance with Condition D.5.6, the Permittee shall maintain records of daily visible emission notations of the baghouse stack exhaust.

(b) To document compliance with Condition D.5.7, the Permittee shall maintain the following:

(1) Daily records of the following operational parameters during normal operation when venting to the atmosphere:

(A) Inlet and outlet differential static pressure.

(2) Documentation of all response steps implemented, per event .

(3) Operation and preventive maintenance logs, including work purchases orders, shall be maintained.

(4) Quality Assurance/Quality Control (QA/QC) procedures or its equivalent.

(5) Operator standard operating procedures (SOP) or its equivalent.

(6) Manufacturer's specifications or its equivalent.

(7) Equipment "troubleshooting" contingency plan.

(8) Documentation of the dates vents are redirected.

(c) To document compliance with Condition D.5.8, the Permittee shall maintain records of the results of the inspections required under Condition D.5.8.

(d) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

SECTION D.6 FACILITY CONDITIONS

Facility Description [326 IAC 2-7-5(15)]

Insignificant Activity

(a) One (1) shot blasting operation (Unit 360), consisting of one (1) shot blast machine controlled by one (1) dust collector, with a maximum capacity of processing 2.16 tons of aluminum castings per hour.

THIS SECTION OF THE PERMIT IS BEING ISSUED UNDER THE PROVISIONS OF 326 IAC 2-1 AND 40 CFR 52.780, WITH CONDITIONS LISTED BELOW.

Construction Conditions [326 IAC 2-1-3.2]

General Construction Conditions

D.6.1 This permit to construct does not relieve the Permittee of the responsibility to comply with the provisions of the Indiana Environmental Management Law (IC 13-11 through 13-20; 13-22 through 13-25; and 13-30), the Air Pollution Control Law (IC 13-17) and the rules promulgated thereunder, as well as other applicable local, state, and federal requirements.

Effective Date of the Permit

D.6.2 Pursuant to IC 13-15-5-3, this section of this permit becomes effective upon its issuance.

D.6.3 Pursuant to 326 IAC 2-1-9(b) (Revocation of Permits), IDEM, OAM may revoke this section of the approved permit if construction is not commenced within eighteen (18) months after receipt of this permit or if construction is suspended for a continuous period of one (1) year or more.

D.6.4 All requirements of these construction conditions shall remain in effect unless modified in a manner consistent with procedures established for modifications of construction permits pursuant to 326 IAC 2 (Permit Review Rules).

First Time Operation Permit

D.6.5 This document shall also become the first-time operation permit for the facilities under this section of this permit, pursuant to 326 IAC 2-1-4 (Operating Permits) when, prior to start of operation, the following requirements are met:

(a) The attached affidavit of construction shall be submitted to:

Indiana Department of Environmental Management
Permit Administration & Development Section, Office of Air Management
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

verifying that the facilities were constructed as proposed in the application. The facilities covered in this section of this permit may begin operating on the date the Affidavit of Construction is postmarked or hand delivered to IDEM.

(b) If construction is completed in phases; i.e., the entire construction is not done continuously, a separate affidavit must be submitted for each phase of construction. Any permit conditions associated with operation start up dates such as stack testing for New Source Performance Standards (NSPS) shall be applicable to each individual phase.

(c) The permittee shall receive an Operation Permit Validation Letter from the Chief of the Permit Administration & Development Section and attach it to this permit.

Operation Conditions

Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.6.6 PSD Minor Limit [326 IAC 2-2] [40 CFR 52.21]

Emissions of PM and PM-10 from the shotblast machine (Unit 360) shall be limited to 24 and 14 tons per year, respectively, to avoid the requirements of 326 IAC 2-2 (PSD).

D.6.7 Particulate Matter (PM) [326 IAC 6-3-2(c)]

Pursuant to 326 IAC 6-3 (Process Operations), the allowable PM emission rate from the shotblast machine (Unit 360) shall not exceed 6.9 pounds per hour when operating at a process weight rate of 4,320 pounds per hour.

The pounds per hour limitation was calculated with the following equation:

$E = 4.10\ P^{0.67}$ where E = rate of emission in pounds per hour; and P = process weight rate in tons per hour

D.6.8 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for this facility and its control device.

Compliance Determination Requirements

D.6.9 Testing Requirements [326 IAC 2-7-6(1),(6)]

The Permittee is not required to test this facility by this permit. However, IDEM may require compliance testing at any specific time when necessary to determine if the facility is in compliance. If testing is required by IDEM, compliance with the PM and PM-10 limits specified in Conditions D.6.6 and D.6.7 shall be determined by a performance test conducted in accordance with Section C - Performance Testing.

D.6.10 Particulate Matter (PM)

The baghouse for PM control shall be in operation at all times when the shotblast machine is in operation and exhausting to the outside atmosphere. This will ensure that the shotblast machine is in compliance with 326 IAC 6-3-2 and that the requirements of 326 IAC 2-2 (PSD) do not apply.

Compliance Monitoring Requirements [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

D.6.11 Visible Emissions Notations

(a) Daily visible emission notations of the baghouse stack exhaust shall be performed during normal daylight operations when exhausting to the atmosphere. A trained employee shall record whether emissions are normal or abnormal.

(b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.

(c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.

(d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.

(e) The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when an abnormal emission is observed.

D.6.12 Parametric Monitoring

The Permittee shall record the total static pressure drop across the baghouse used in conjunction with the shot blast machine (Unit 360) at least once weekly when the shot blast machine (Unit 360) is in operation when venting to the atmosphere. Unless operated under conditions for which the Compliance Response Plan specifies otherwise, the pressure drop across the baghouse shall be maintained within the range of 1.0 and 6.0 inches of water or a range established during the latest stack test. The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when the pressure reading is outside of the above mentioned range for any one reading.

The instrument used for determining the pressure shall comply with Section C - Pressure Gauge Specifications, of this permit, shall be subject to approval by IDEM, OAM, and shall be calibrated at least once every six (6) months.

D.6.13 Baghouse Inspections

An inspection shall be performed each calender quarter of all bags controlling the shotblast operation when venting to the atmosphere. A baghouse inspection shall be performed within three months of redirecting vents to the atmosphere and every three months thereafter. Inspections are optional when venting to the indoors. All defective bags shall be replaced.

D.6.14 Broken or Failed Bag Detection

In the event that bag failure has been observed:

(a) The affected compartments will be shut down immediately until the failed units have been repaired or replaced. Within eight (8) hours of the determination of failure, response steps according to the timetable described in the Compliance Response Plan shall be initiated. For any failure with corresponding response steps and timetable not described in the Compliance Response Plan, response steps shall be devised within eight (8) hours of discovery of the failure and shall include a timetable for completion. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).

(b) For single compartment baghouses, failed units and the associated process will be shut down immediately until the failed units have been repaired or replaced. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).

Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

D.6.15 Record Keeping Requirements

(a) To document compliance with Condition D.6.11, the Permittee shall maintain records of daily visible emission notations of the baghouse stack exhaust.

(b) To document compliance with Condition D.6.12, the Permittee shall maintain the following:

(1) Daily records of the following operational parameters during normal operation when venting to the atmosphere:

(A) Inlet and outlet differential static pressure; and

(2) Documentation of all response steps implemented, per event .

(3) Operation and preventive maintenance logs, including work purchases orders, shall be maintained.

(4) Quality Assurance/Quality Control (QA/QC) procedures or its equivalent.

(5) Operator standard operating procedures (SOP) or its equivalent.

(6) Manufacturer's specifications or its equivalent.

(7) Equipment "troubleshooting" contingency plan.

(8) Documentation of the dates vents are redirected.

(c) To document compliance with Condition D.6.13, the Permittee shall maintain records of the results of the inspections required under Condition D.6.13 and the dates the vents are redirected.

(d) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR MANAGEMENT
COMPLIANCE DATA SECTION

PART 70 OPERATING PERMIT CERTIFICATION

Source Name: CMI-Precision Mold, Inc.
Source Address: 51650 County Road 133, Bristol, Indiana 46507
Mailing Address: 51650 County Road 133, Bristol, Indiana 46507
Part 70 Permit No.: T039-6890-00191

This certification shall be included when submitting monitoring, testing reports/results or other documents as required by this permit.

Please check what document is being certified:

9 Annual Compliance Certification Letter

9 Test Result (specify) _____

9 Report (specify) _____

9 Notification (specify) _____

9 Other (specify) _____

I certify that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

Signature:

Printed Name:

Title/Position:

Date:

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR MANAGEMENT

COMPLIANCE DATA SECTION
P.O. Box 6015
100 North Senate Avenue
Indianapolis, Indiana 46206-6015
Phone: 317-233-5674
Fax: 317-233-5967

PART 70 OPERATING PERMIT
EMERGENCY/DEVIATION OCCURRENCE REPORT

Source Name: CMI-Precision Mold, Inc.
Source Address: 51650 County Road 133, Bristol, Indiana 46507
Mailing Address: 51650 County Road 133, Bristol, Indiana 46507
Part 70 Permit No.: T039-6890-00191

This form consists of 2 pages **Page 1 of 2**

Check either No. 1 or No.2
9 1. This is an emergency as defined in 326 IAC 2-7-1(12) C The Permittee must notify the Office of Air Management (OAM), within four (**4**) business hours (1-800-451-6027 or 317-233-5674, ask for Compliance Section); and C The Permittee must submit notice in writing or by facsimile within two (**2**) days (Facsimile Number: 317-233-5967), and follow the other requirements of 326 IAC 2-7-16
9 2. This is a deviation, reportable per 326 IAC 2-7-5(3)(c) C The Permittee must submit notice in writing within ten (**10**) calendar days

If any of the following are not applicable, mark N/A

Facility/Equipment/Operation:
Control Equipment:
Permit Condition or Operation Limitation in Permit:
Description of the Emergency/Deviation:
Describe the cause of the Emergency/Deviation:

If any of the following are not applicable, mark N/A **Page 2 of 2**

Date/Time Emergency/Deviation started:
Date/Time Emergency/Deviation was corrected:
Was the facility being properly operated at the time of the emergency/deviation? Y N Describe:
Type of Pollutants Emitted: TSP, PM-10, SO_2, VOC, NO_X, CO, Pb, other:
Estimated amount of pollutant(s) emitted during emergency/deviation:
Describe the steps taken to mitigate the problem:
Describe the corrective actions/response steps taken:
Describe the measures taken to minimize emissions:
If applicable, describe the reasons why continued operation of the facilities are necessary to prevent imminent injury to persons, severe damage to equipment, substantial loss of capital investment, or loss of product or raw materials of substantial economic value:

Form Completed by: _____
Title / Position: _____
Date: _____
Phone: _____

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR MANAGEMENT
COMPLIANCE DATA SECTION

Part 70 Quarterly Report

Source Name: CMI-Precision Mold, Inc.
Source Address: 51650 County Road 133, Bristol, Indiana 46507
Mailing Address: 51650 County Road 133, Bristol, Indiana 46507
Part 70 Permit No.: T039-6890-00191
Facility: reverberatory furnaces A and B in the melting and combustion operations (Units 001 and 002)
Parameter: tons of metal throughput
Limit: The total metal throughput to reverberatory furnaces A and B in the melting and combustion operations (Units 001 and 002) shall be limited to 41,610 tons per twelve (12) consecutive month period. This metal throughput limitation is required to limit the potential to emit of PM to 21.3 tons per twelve (12) consecutive month period, and to limit the potential to emit of VOC to 4.4 tons per twelve (12) consecutive month period.

YEAR: _____

Month	Column 1	Column 2	Column 1 + Column 2
	Metal Throughput This Month (tons)	Metal Throughput Previous 11 Months (tons)	12 Month Total Metal Throughput (tons)
Month 1			
Month 2			
Month 3			

9 No deviation occurred in this quarter.

9 Deviation/s occurred in this quarter.
Deviation has been reported on: _____

Submitted by: _____
Title / Position: _____
Signature: _____
Date: _____
Phone: _____

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR MANAGEMENT
COMPLIANCE DATA SECTION

Part 70 Quarterly Report

Source Name: CMI-Precision Mold, Inc.
Source Address: 51650 County Road 133, Bristol, Indiana 46507
Mailing Address: 51650 County Road 133, Bristol, Indiana 46507
Part 70 Permit No.: T039-6890-00191
Facility: the four (4) semi-permanent molding operations (Units 100-103)
Parameter: tons of metal throughput
Limit: The total metal throughput to the four (4) semi-permanent molding operations (Units 100-103) shall be limited to 28,470 tons per twelve (12) consecutive month period. This metal throughput limitation is required to limit the potential to emit of PM to 3.7 tons per twelve (12) consecutive month period, and to limit the potential to emit of VOC to 24.3 tons per twelve (12) consecutive month period.

YEAR: _____

Month	Column 1	Column 2	Column 1 + Column 2
	Metal Throughput This Month (tons)	Metal Throughput Previous 11 Months (tons)	12 Month Total Metal Throughput (tons)
Month 1			
Month 2			
Month 3			

9 No deviation occurred in this quarter.

9 Deviation/s occurred in this quarter.
Deviation has been reported on: _____

Submitted by: _____
Title / Position: _____
Signature: _____
Date: _____
Phone: _____

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR MANAGEMENT
COMPLIANCE DATA SECTION

Part 70 Quarterly Report

Source Name: CMI-Precision Mold, Inc.
Source Address: 51650 County Road 133, Bristol, Indiana 46507
Mailing Address: 51650 County Road 133, Bristol, Indiana 46507
Part 70 Permit No.: T039-6890-00191
Facility: the core making operation (Unit 200)
Parameter: Volatile Organic Compounds (VOC)
Limit: Total VOC usage (not including the triethylamine (TEA) Catalyst) in the core making operation (Unit 200) shall be limited such that fugitive VOC emissions (not including TEA emissions) are limited to 40 tons per twelve (12) consecutive month period.

YEAR: _____

Month	Column 1	Column 2	Column 1 + Column 2
	VOC Usage This Month (tons)	VOC Usage Previous 11 Months (tons)	12 Month Total VOC Usage (tons)
Month 1			
Month 2			
Month 3			

9 No deviation occurred in this quarter.

9 Deviation/s occurred in this quarter.
Deviation has been reported on: _____

Submitted by: _____
Title / Position: _____
Signature: _____
Date: _____
Phone: _____

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR MANAGEMENT
COMPLIANCE DATA SECTION

Part 70 Quarterly Report

Source Name: CMI-Precision Mold, Inc.
Source Address: 51650 County Road 133, Bristol, Indiana 46507
Mailing Address: 51650 County Road 133, Bristol, Indiana 46507
Part 70 Permit No.: T039-6890-00191
Facility: the core removal operation (Unit 230)
Parameter: tons of sand throughput
Limit: The total sand throughput to the core removal operation (Unit 230) shall be limited to 20,808 tons per twelve (12) consecutive month period. This sand throughput limitation is required to limit the potential to emit of PM to 20.8 tons per twelve (12) consecutive month period, and to limit the potential to emit of VOC to 12.5 tons per twelve (12) consecutive month period.

YEAR: _____

Month	Column 1	Column 2	Column 1 + Column 2
	Sand Throughput This Month (tons)	Sand Throughput Previous 11 Months (tons)	12 Month Total Sand Throughput (tons)
Month 1			
Month 2			
Month 3			

9 No deviation occurred in this quarter.

9 Deviation/s occurred in this quarter.
Deviation has been reported on: _____

Submitted by: _____
Title / Position: _____
Signature: _____
Date: _____
Phone: _____

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR MANAGEMENT
COMPLIANCE DATA SECTION

PART 70 OPERATING PERMIT
QUARTERLY COMPLIANCE MONITORING REPORT

Source Name: CMI-Precision Mold, Inc.
Source Address: 51650 County Road 133, Bristol, Indiana 46507
Mailing Address: 51650 County Road 133, Bristol, Indiana 46507
Part 70 Permit No.: T039-6890-00191

Months: _____ **to** _____ **Year:** _____

This report is an affirmation that the source has met all the compliance monitoring requirements stated in this permit. This report shall be submitted quarterly. Any deviation from the compliance monitoring requirements and the date(s) of each deviation must be reported. Additional pages may be attached if necessary. This form can be supplemented by attaching the Emergency/Deviation Occurrence Report. If no deviations occurred, please specify in the box marked "No deviations occurred this reporting period".

9 NO DEVIATIONS OCCURRED THIS REPORTING PERIOD

9 THE FOLLOWING DEVIATIONS OCCURRED THIS REPORTING PERIOD.

Compliance Monitoring Requirement (e.g. Permit Condition D.1.3)	**Number of Deviations**	**Date of each Deviation**

Form Completed By: _____
Title/Position: _____
Date: _____
Phone: _____

Attach a signed certification to complete this report.

Indiana Department of Environmental Management
Office of Air Management

Technical Support Document (TSD) for a Part 70 Operating Permit and Enhanced New Source Review (ENSR)

Source Background and Description

Source Name:	**CMI-Precision Mold, Inc.**
Source Location:	**51650 County Road 133, Bristol, IN 46507**
County:	**Elkhart**
SIC Code:	**3365, 3398**
Operation Permit No.:	**T039-6890-00191**
Permit Reviewer:	**Trish Earls/EVP**

The Office of Air Management (OAM) has reviewed a Part 70 permit application from CMI-Precision Mold, Inc. relating to the operation of an aluminum foundry manufacturing cast and machined aluminum products.

Permitted Emission Units and Pollution Control Equipment

The source consists of the following permitted emission units and pollution control devices:

(1) One (1) melting and combustion operation (Unit 001) consisting of one (1) reverberatory furnace A processing aluminum at a maximum rate of 4.75 tons per hour, rated at 9.1 million (MM) British thermal units (Btu) per hour, combusting natural gas, and exhausting to one (1) stack (Stack 001);

(2) One (1) melting and combustion operation (Unit 002) consisting of one (1) reverberatory furnace B processing aluminum at a maximum rate of 4.75 tons per hour, rated at 9.1 MMBtu per hour, combusting natural gas, and exhausting to one (1) stack (Stack 001);

(3) One (1) melting and combustion operation (Unit 020) consisting of one (1) reverberatory furnace C processing aluminum at a maximum rate of 6.0 tons per hour, rated at 22.8 MMBtu per hour, combusting natural gas, and exhausting to one (1) stack (Stack 020);

(4) One (1) melting and combustion operation (Unit 021) consisting of one (1) reverberatory furnace D processing aluminum at a maximum rate of 6.0 tons per hour, rated at 22.8 MMBtu per hour, combusting natural gas, and exhausting to one (1) stack (Stack 021);

(5) One (1) melting and combustion operation (Unit 022) consisting of one (1) reverberatory furnace E processing aluminum at a maximum rate of 3.0 tons per hour, rated at 20.4 million MMBtu per hour, combusting natural gas, and exhausting to one (1) stack (Stack 022);

(6) One (1) semi-permanent molding operation (Unit 100) consisting of one (1) semi-permanent turntable and six (6) casting machines with molds sent to a casting monorail, processing aluminum at a maximum rate of 2.0 tons per hour, and exhausting through three (3) roof exhaust fans (Stacks 100a, 100b, and 100c);

(7) One (1) semi-permanent molding operation (Unit 101) consisting of one (1) semi-permanent turntable and six (6) casting machines with molds sent to a casting monorail, processing aluminum at a maximum rate of 2.0 tons per hour, and exhausting to four (4) roof exhaust fans (Stacks 101a, 101b, 101c, and 101d);

(8) One (1) semi-permanent molding operation (Unit 102) consisting of one (1) semi-permanent turntable and six (6) casting machines with molds sent to a casting monorail, processing aluminum at a maximum rate of 2.0 tons per hour, and exhausting to four (4) roof exhaust fans (Stacks 102a, 102b, 102c, and 102d);

(9) One (1) semi-permanent molding operation (Unit 103) consisting of one (1) prototype semi-permanent mold turntable (operation is not necessarily performed on any particular turntable) and six (6) available casting machines (operations are performed on individual casting machines) with molds sent to a casting monorail, processing aluminum at a maximum rate of 0.5 tons per hour, and exhausting to the general plant atmosphere;

(10) One (1) core making operation (Unit 200) consisting of five (5) sand silos, three (3) sand heaters, four (4) sand mixers, eight (8) core machines, and storage racks, processing sand and resin with a maximum sand process rate of 4.5 tons per hour, with one (1) dust collector (DC-1) on sand silos #3 and #4 for particulate control which exhausts through one (1) stack (Stack 200a), and eight (8) acid scrubbers on the core machines for VOC control which exhaust through five (5) stacks (Stacks 200b through 200f);

(11) One (1) prototype core making operation (Unit 210) consisting of one (1) sand silo, one (1) sand mixer, and storage racks, processing sand and resin with a maximum sand process rate of 0.25 tons per hour. This operation is portable and can utilize sand from any of the five sand silos in the core making operation (Unit 200);

(12) One (1) core removal operation (Unit 230) consisting of a core knockout room with multiple automatic knockout hammers, with a maximum sand throughput of 4.75 tons per hour, exhausting to two (2) stacks (Stacks 230 a-b); and

(13) One (1) mold blasting room (Unit 350) with a maximum capacity of 31.2 tons of steel molds per hour and 3 tons of blasting material per hour, controlled by a baghouse, with emissions exhausting through one (1) stack (Stack 350).

Unpermitted Emission Units and Pollution Control Equipment

There are no unpermitted facilities operating at this source during this review process.

Emission Units and Pollution Control Equipment Under Enhanced New Source Review (ENSR)

A new shot blasting operation consisting of one (1) shot blast machine and dust collector (Unit 360) is being added to this source and will be reviewed under the ENSR process (see item 25 under the Insignificant Activities section of this TSD). Although the new shot blasting operation qualifies as an Insignificant Activity because it is controlled by a dust collector with a design grain loading of less than 0.03 grains per actual cubic foot and a gas flow rate less than or equal to four thousand (4,000) actual cubic feet per minute, allowable particulate matter emissions from this shot blasting operation are greater than 25 tons per year. This requires the unit to obtain a construction permit pursuant to 326 IAC 2-1.

Under the current, acceptable methods for calculating air emissions, the potential emissions for Units 001, 002, 100 through 103, 200, 210, and 230 have been found to be higher than the level of potential emissions calculated when these units were originally registered in 1984. As a result, the potential emissions from Units 001, 002, 100 through 103, 200, and 230 must be limited to avoid the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)). Therefore, these units are also being reviewed under the ENSR process.

Insignificant Activities

The source also consists of the following insignificant activities, as defined in 326 IAC 2-7-1(21):

(1) Natural gas-fired combustion sources with heat input equal to or less than ten (10) million Btu per hour;
  (a) Three (3) aluminum gas holding furnaces (Units 1, 3, and 4), each rated at 3 MMBtu/hr;
  (b) Four (4) aluminum gas holding furnaces (Units 20, 27, 28, and 29), each rated at 1.3 MMBtu/hr;
  (c) One (1) aluminum gas holding furnace (Unit 8), rated at 2.6 MMBtu/hr;
  (d) Twenty-two (22) air make-up units, each rated a 5 MMBtu/hr;
  (e) Two (2) solution heat treat furnaces (Units 40 and 41), each rated at 6.13 MMBtu/hr;
  (f) Two (2) solution heat treat furnaces (Units 42 and 43), each rated at 4.45 MMBtu/hr;
  (g) Two (2) aging heat treat furnaces (Numbers 45 and 46), each rated at 0.63 MMBtu/hr;
  (h) One (1) aging heat treat furnace (Number 44) rated at 1.47 MMBtu/hr;
  (i) Four (4) quench tank tube burners, each rated at 1.83 MMBtu per hour;
  (j) Four (4) rinse tank tube burners, each rated at 1.83 MMBtu per hour;
  (k) Five (5) ladle heating units, each rated at 1 MMBtu/hr;
  (l) Forty-six (46) mold heating units, each rated at 0.25 MMBtu/hr;
(2) Propane or liquefied petroleum gas, or butane-fired combustion source with heat input equal to or less than six million (6,000,000) Btu per hour;
(3) Combustion source flame safety purging on startup;
(4) A petroleum fuel, other than gasoline dispensing facility, having a storage capacity of less than or equal to 10,500 gallons, and dispensing less than or equal to 230,000 gallons per month;
(5) VOC and HAP storage containers: vessels storing lubricating oils, hydraulic oils, machining oils, and machining fluids;
(6) Refractory storage not requiring air pollution control equipment;
(7) Application of oils, greases, lubricants, or other nonvolatile materials applied as temporary protective coatings;
(8) Machining where an aqueous cutting coolant continuously floods the machining interface;
(9) Degreasing operations that do not exceed 145 gallons per 12 months; except if subject to 326 IAC 20-6;
(10) The following equipment related to manufacturing activities not resulting in the emissions of HAPs: brazing equipment, cutting torches, soldering equipment, and welding equipment;
(11) Closed loop heating and cooling systems;
(12) Any of the following structural steel and bridge fabrication activities: using 80 tons or less welding consumables;
(13) Any operation using aqueous solutions containing less than 1% by weight of VOCs excluding HAPs;

(14) Noncontact cooling tower systems with either of the following:
  (a) Natural draft cooling towers not regulated under a NESHAP;
  (b) Forced and induced draft cooling tower system not regulated under a NESHAP;
(15) Quenching operations used with heat treating processes;
  (a) Four (4) polymer quench tanks which will quench aluminum castings at a rate of 7,186 pounds per hour
(16) Replacement or repair of electrostatic precipitators, bags in baghouses, and filters in other air filtration equipment;
(17) Heat exchanger cleaning and repair;
(18) Trimmers that do not produce fugitive emissions and that are equipped with a dust collector or trim material recovery device such as a bag filter or cyclone;
(19) Paved and unpaved roads and parking lots with public access;
(20) Purging of gas lines and vessels that is related to routine maintenance and repair of buildings, structures, or vehicles at the source where air emissions from those activities would not be associated with any production process;
(21) Blowdown for any of the following: sight glass; boiler; compressors; pumps; and cooling tower;
(22) Furnaces used for melting metals other than beryllium with a brim full capacity of less than or equal to 450 cubic inches by volume;
(23) On-site fire and emergency response training approved by the department;
(24) Other emergency equipment: stationary fire pumps;
(25) Grinding and machining operations controlled with fabric filters, scrubbers, mist collectors, wet collectors and electrostatic precipitators with a design grain loading of less than or equal to 0.03 grains per actual cubic foot and a gas flow rate less than or equal to 4000 actual cubic feet per minute, including the following: deburring; buffing; polishing; abrasive blasting; pneumatic conveying; woodworking operations; and specifically the following:
  (a) One (1) shot blasting operation (Unit 360), consisting of one (1) shot blast machine controlled by one (1) dust collector, with a maximum capacity of processing 2.16 tons of aluminum castings per hour.
(26) Purge double block and bleed valves;
(27) Mold release agents using low volatile products (vapor pressure less than or equal to 2 kilopascals measured at 38 degrees C);
(28) A laboratory as defined in 326 IAC 2-7-1 (21)(C); and
(29) Other activities or categories not previously listed: activities with emissions equal to or less than thresholds require listing only:
  (a) Two (2) electric holding furnaces, each rated at 135 KW;
  (b) Dross skimming and cooling operations
  (c) Permanent molding operations;
  (d) Squeeze casting operations;
  (e) Electric holding furnaces and crucibles;
  (f) Dross transfer and aluminum scrap handling;
  (g) Die penetrant station with powder collector;
  (h) Controlled shot blasting operations;
  (i) Controlled grinding operations;
  (j) Sand knockout storage pile, and
  (k) Two launders, each rated at 327.5 KW.

Existing Approvals

The source has been operating under the following approvals:

(1) Registration issued on December 22, 1983 for an aluminum casting manufacturing facility and amended on February 6, 1984

(2) CP 039-3096-00191, issued on October 27, 1993
Amended on November 12, 1993
Permit Validation on January 24, 1994
Permit Validation on August 12, 1994
Permit Validation on October 4, 1994
Permit Validation on May 1, 1995

(3) CP 039-3439-00191, issued on March 18, 1994

(4) CP 039-4125-00191, issued on March 8, 1995
Permit Validation on November 27, 1995

(5) Registration No. CP 039-4907, issued on October 12, 1995

(6) CP 039-8983-00191, issued November 19, 1997

Recommendation

The staff recommends to the Commissioner that the Part 70 permit be approved. This recommendation is based on the following facts and conditions:

Unless otherwise stated, information used in this review was derived from the application and additional information submitted by the applicant.

An administratively complete Part 70 permit application for the purposes of this review was received on October 11, 1996. Additional information was received on January 27, 1998.

A notice of completeness letter was mailed to CMI - Precision Mold, Inc. on October 29, 1996.

Emission Calculations

See Appendix A of this document for detailed emissions calculations (thirteen (13) pages).

Potential Emissions for the Source

Pursuant to 326 IAC 1-2-55, Potential Emissions are defined as “emissions of any one (1) pollutant which would be emitted from a facility, if that facility were operated without the use of pollution control equipment unless such control equipment is necessary for the facility to produce its normal product or is integral to the normal operation of the facility.”

Pollutant	Potential Emissions (tons/year)
PM	greater than 250
PM-10	greater than 250
SO_2	less than 100
VOC	greater than 250
CO	less than 100
NO_x	greater than 100 but less than 250

Note: For the purpose of determining Title V applicability for particulates, PM-10, not PM, is the regulated pollutant in consideration.

HAP's	Potential Emissions (tons/year)
Phosphorus	less than 10
Chromium compounds	less than 10
Lead compounds	less than 10
Manganese compounds	less than 10
Nickel compounds	less than 10
Formaldehyde	less than 10
Benzene	less than 10
Toluene	less than 10
Hexachloroethane	less than 10
Cumene	less than 10
MDI	less than 10
Methanol	less than 10
Methylene Chloride	less than 10
Naphthalene	less than 10
Phenol	less than 10
1,1,1 - Trichloroethane	less than 10
Triethylamine	greater than 25
Xylene	less than 10
TOTAL	greater than 25

(a) The potential emissions (as defined in the Indiana Rule) of particulate matter with an aerodynamic diameter less than or equal to 10 microns (PM-10), volatile organic compounds (VOC), and nitrogen oxides (NOx) are equal to or greater than 100 tons per year. Therefore, the source is subject to the provisions of 326 IAC 2-7.

(b) The potential emissions (as defined in Indiana Rule) of any single HAP is equal to or greater than ten (10) tons per year and the potential emissions (as defined in Indiana Rule) of a combination HAPs is greater than or equal to twenty-five (25) tons per year. Therefore, the source is subject to the provisions of 326 IAC 2-7.

Actual Emissions

The following table shows the actual emissions from the source. This information reflects the OAM 1996 emission data.

Pollutant	Actual Emissions (tons/year)
PM	57.26
PM-10	33.13
SO_2	24.88
VOC	64.55
CO	3.59
NO_x	35.72
Phosphorus	0.00
Chromium compounds	0.02
Lead compounds	0.02
Manganese compounds	0.06
Nickel compounds	0.03
Formaldehyde	0.03
Benzene	0.02
Toluene	0.01

Hexachloroethane	0.64
Cumene	0.04
MDI	0.0
Methanol	0.0
Methylene Chloride	0.0
Naphthalene	0.36
Phenol	0.0
1,1,1 - Trichloroethane	0.0
Triethylamine	3.4
Xylene	0.09

Limited Potential to Emit

The table below summarizes the total limited potential to emit of the significant emission units.

	Limited Potential to Emit (tons/year)						
Process/ facility	PM	PM-10	SO_2	VOC	CO	NO_X	HAPs
Melting and Combustion (Unit 001)	10.64	10.64	9.37	2.20	0.42	9.90	0.11
Melting and Combustion (Unit 002)	10.64	10.64	9.37	2.20	0.42	9.90	0.05
Semi-Permanent Molding Operations (Units 100,101,102 & 103)	3.71	3.71	0.29	24.34	0.0	0.13	0.0
Sand Core Making Operation (Unit 200)	22.08	0.48	0.0	48.14	0.0	0.0	16.0
Prototype Core Making Operations (Unit 210)	1.66	0.04	0.0	7.66	0.0	0.0	1.0
Core Removal Operations (Unit 230)	20.81	3.43	0.0	12.48	0.0	0.0	0.0
Total Emissions *	155.0	108.8	78.9	115.9	28.6	189.7	17.5

* Total Emissions include emissions from all significant emission units and Insignificant Activities at the source.

(a) Under the current, acceptable methods for calculating air emissions, the potential emissions for Units 001, 002, 100 through 103, 200, 210, and 230 have been found to be higher than the level of potential emissions calculated when these units were originally registered in 1984. Therefore, to ensure that subsequent modifications to the source were not major modifications of a major PSD source, these emission units will be limited such that emissions of all criteria pollutants are below the 100 ton major source threshold for PSD. These units will be limited as follows:

(1) The combined metal throughput capacity of the melting and combustion operations (Units 001 and 002) will be limited to 3,467.5 tons per month, which is 50% of the combined maximum metal throughput capacity;

(2) The combined metal throughput capacity of the semi-permanent molding operations (Units 100 through 103) will be limited to 2,372.5 tons per month, which is 50% of the combined maximum metal throughput capacity;

(3) The fugitive VOC emissions (not including Triethylamine (TEA) emissions which are controlled by the eight (8) wet scrubbers) from the core making operations (Unit 200) will be limited to 3.3 tons per month (40 tons per year) such that total VOC emissions, including TEA, are limited to 48.14 tons per year; and

(4) The combined sand throughput capacity of the core removal operations (Unit 230) will be limited to 1,734 tons per month, which is 50% of the combined maximum sand throughput capacity.

County Attainment Status

The source is located in Elkhart County.

Pollutant	Status
TSP	attainment
PM-10	attainment
SO_2	attainment
NO_2	attainment
Ozone	attainment
CO	attainment
Lead	attainment

(a) Volatile organic compounds (VOC) and oxides of nitrogen (NO_X) are precursors for the formation of ozone. Therefore, VOC and NO_X emissions are considered when evaluating the rule applicability relating to the ozone standards. Elkhart County has been designated as attainment or unclassifiable for ozone.

Part 70 Permit Conditions

This source is subject to the requirements of 326 IAC 2-7, pursuant to which the source has to meet the following:

(1) Emission limitations and standards, including those operational requirements and limitations that assure compliance with all applicable requirements at the time of issuance of Part 70 permits.

(2) Monitoring and related record keeping requirements which assume that all reasonable information is provided to evaluate continuous compliance with the applicable requirements.

Federal Rule Applicability

(a) This source is not subject to the requirements of the New Source Performance Standard (NSPS), 326 IAC 12, (40 CFR 60.19, Subpart S (Primary Aluminum Reduction), because the source does not perform primary aluminum reduction as defined in 40 CFR 60.191. This source is a secondary aluminum foundry plant, therefore the requirements under 326 IAC 12, (40 CFR 60.19, Subpart S) do not apply.

(b) There are currently no National Emission Standards for Hazardous Air Pollutants (NESHAP) (40 CFR Part 63) applicable to this source.

State Rule Applicability - Entire Source

326 IAC 2-2 (Prevention of Significant Deterioration)

This source is not subject to the requirements of 326 IAC 2-2 (PSD). Since this type of operation is one of the 28 listed source categories under 326 IAC 2-2, units 001, 002, 100 through 103, 200, 210, and 230 will be limited as follows so that emissions of PM and VOC are limited to below 100 tons per year to avoid the requirements of 326 IAC 2-2:

(1) The combined metal throughput capacity of the melting and combustion operations (Units 001 and 002) will be limited to 3,467.5 tons per month, which is 50% of the combined maximum metal throughput capacity;
(2) The combined metal throughput capacity of the semi-permanent molding operations (Units 100 through 103) will be limited to 2,372.5 tons per month, which is 50% of the combined maximum metal throughput capacity;
(3) The fugitive VOC emissions (not including TEA emissions which are controlled by the eight (8) wet scrubbers) from the core making operations (Unit 200) will be limited to 3.3 tons per month; and
(4) The combined sand throughput capacity of the core removal operations (Unit 230) will be limited to 1,734 tons per month, which is 50% of the combined maximum sand throughput capacity.

Under the current, acceptable methods for calculating air emissions, the potential emissions for Units 001, 002, 100 through 103, 200, 210, and 230 have been found to be higher than the level of potential emissions calculated when these units were originally registered in 1984. Therefore, to ensure that all of the subsequent modifications to the source are minor PSD modifications, the source is limiting the VOC and PM emissions from the above-mentioned facilities. The addition of the new shot blasting operation (Unit 360) is a minor modification to a major PSD source because controlled PM and PM10 emissions are 1.61 and 0.16 tons per year, respectively, and are less than the major modification thresholds for PM and PM10 of 25 and 15 tons per year, respectively.

326 IAC 2-6 (Emission Reporting)

This source is subject to 326 IAC 2-6 (Emission Reporting), because it has the potential to emit more than one hundred (100) tons per year of PM, PM10, and VOC. Pursuant to this rule, the owner/operator of the source must annually submit an emission statement for the source. The annual statement must be received by April 15 of each year and contain the minimum requirement as specified in 326 IAC 2-6-4. The submittal should cover the period defined in 326 IAC 2-6-2(8)(Emission Statement Operating Year).

326 IAC 5-1 (Visible Emissions Limitations)

Pursuant to 326 IAC 5-1-2 (Visible Emissions Limitations), except as provided in 326 IAC 5-1-3 (Temporary Exemptions), visible emissions shall meet the following, unless otherwise stated in this permit:

(a) Visible emissions shall not exceed an average of forty percent (40%) opacity in twenty-four (24) consecutive readings as determined by 326 IAC 5-1-4,

(b) Visible emissions shall not exceed sixty percent (60%) opacity for more than a cumulative total of fifteen (15) minutes (sixty (60) readings) in a six (6) hour period.

326 IAC 6-4 (Fugitive Dust Emissions)

This source is subject to 326 IAC 6-4 fugitive dust emissions. Pursuant to 326 IAC 6-4 (Fugitive Dust Emissions), fugitive dust shall not be visible crossing the boundary or property line of a source. Observances of visible emissions crossing property lines may be refuted by factual data expressed in 326 IAC 6-4-2 (1), (2), or (3).

State Rule Applicability - Individual Facilities

326 IAC 2-1-3.4 (New Source Toxics Control)

326 IAC 2-1-3.4 applies to new or reconstructed facilities with potential emissions of any single HAP equal or greater than ten (10) tons per year and potential emissions of a combination of HAPs greater than or equal to twenty-five (25) tons per year. The rule does not apply to facilities that have been constructed before the effective date of this rule (July 27, 1997). Since all of the facilities at this source have been constructed prior to the effective date of this rule, the requirements of 326 IAC 2-1-3.4 do not apply. The new shotblast machine has negligible HAP emissions, therefore, it is not subject to this rule.

326 IAC 6-3-2 (Process Operations)

The PM emissions from each of reverberatory furnaces A and B (Units 001 and 002) shall be limited to 11.6 pounds per hour (51.0 tons per year). This emission limit is based on a process weight rate of 4.75 tons per hour for each furnace and the following equation:

$E = 4.10 P^{0.67}$ where E = rate of emission in pounds per hour and
P = process weight rate in tons per hour
= 4.75 tons per hour

$E = 4.10 (4.75)^{0.67}$
= 11.6 pounds per hour (51.0 tons per year)

Since the potential uncontrolled particulate emissions from each of reverberatory furnaces A and B during melting and combustion are 4.9 pounds per hour, the facilities are in compliance with 326 IAC 6-3-2.

The PM emissions from reverberatory furnaces C and D (Units 020 and 021) shall each be limited to 13.6 pounds per hour (59.7 tons per year). This emission limit is based on a process weight rate of 6.0 tons per hour for each emission unit and the following equation:

$E = 4.10 P^{0.67}$ where E = rate of emission in pounds per hour and
P = process weight rate in tons per hour
= 6.0 tons per hour

$E = 4.10 (6.0)^{0.67}$
= 13.6 pounds per hour (59.7 tons per year)

Since the potential uncontrolled PM emissions from each of the reverberatory furnaces during melting and combustion are 6.3 pounds per hour, the facilities are in compliance with 326 IAC 6-3-2.

The PM emissions from reverberatory furnace E (Unit 022) shall be limited to 8.6 pounds per hour (37.5 tons per year). This emission limit is based on a process weight rate of 3.0 tons per hour and the following equation:

$E = 4.10 P^{0.67}$ where E = rate of emission in pounds per hour and
P = process weight rate in tons per hour
= 3.0 tons per hour

$E = 4.10 (3.0)^{0.67}$
= 8.6 pounds per hour (37.5 tons per year)

Since the potential uncontrolled PM emissions from the reverberatory furnace during melting and combustion are 3.3 pounds per hour, the facility is in compliance with 326 IAC 6-3-2.

The PM emissions from each of the three (3) semi-permanent mold making operations (Units 100 through 102) shall be limited to 6.5 pounds per hour (28.6 tons per year). This emission limit is based on a process weight rate of 2.0 tons per hour for each emission unit and the following equation:

$E = 4.10\ P^{0.67}$ where E = rate of emission in pounds per hour and
P = process weight rate in tons per hour
= 2.0 tons per hour

$E = 4.10\ (2.0)^{0.67}$
= 6.5 pounds per hour (28.6 tons per year)

The PM emissions from the one (1) prototype semi-permanent mold making operations (Unit 103) shall be limited to 2.6 pounds per hour (11.3 tons per year). This emission limit is based on a process weight rate of 0.5 tons per hour and the following equation:

$E = 4.10\ P^{0.67}$ where E = rate of emission in pounds per hour and
P = process weight rate in tons per hour
= 0.5 tons per hour

$E = 4.10\ (0.5)^{0.67}$
= 2.6 pounds per hour (11.3 tons per year)

Potential uncontrolled particulate emissions from all four (4) semi-permanent molding operations are 1.7 pounds per hour, therefore, the facilities are in compliance with 326 IAC 6-3-2.

The PM emissions from the sand handling and the sand silos in the core making operations (Unit 200) shall be limited to 11.2 pounds per hour (49.2 tons per year). This emission limit is based on a process weight rate of 4.5 tons per hour and the following equation:

$E = 4.10\ P^{0.67}$ where E = rate of emission in pounds per hour and
P = process weight rate in tons per hour
= 4.5 tons per hour

$E = 4.10\ (4.5)^{0.67}$
= 11.2 pounds per hour (49.2 tons per year)

The potential uncontrolled particulate emissions from the sand handling and the sand silos in the core making operations are 6.8 pounds per hour, therefore, the facility is in compliance with 326 IAC 6-3-2.

The PM emissions from the sand handling and the sand silos associated with the prototype core making operations (Unit 210) shall be limited to 1.62 pounds per hour (7.1 tons per year). This emission limit is based on a process weight rate of 0.25 tons per hour and the following equation:

$E = 4.10\ P^{0.67}$ where E = rate of emission in pounds per hour and
P = process weight rate in tons per hour
= 0.25 tons per hour

$E = 4.10\ (0.25)^{0.67}$
= 1.62 pounds per hour (7.1 tons per year)

The potential uncontrolled particulate emissions from the sand handling and the sand silos associated with the prototype core making operations are 0.39 pounds per hour, therefore, the facility is in compliance with 326 IAC 6-3-2.

The PM emissions from the core knockout operation (Unit 230) shall be limited to 11.6 pounds per hour (51.0 tons per year). This emission limit is based on a process weight rate of 4.75 tons per hour and the following equation:

$E = 4.10\ P^{0.67}$ where E = rate of emission in pounds per hour and
P = process weight rate in tons per hour
= 4.75 tons per hour

$E = 4.10\ (4.75)^{0.67}$
= 11.6 pounds per hour (51.0 tons per year)

The potential uncontrolled particulate emissions from the core knockout operation are 9.5 pounds per hour, therefore, the facility is in compliance with 326 IAC 6-3-2.

The PM emissions from the shotblast machine (Unit 350) shall be limited to 40.3 pounds per hour. This emission limit is based on a process weight rate of 62,400 pounds per hour and the following equation:

$E = 55.0\ P^{0.11} - 40$ where E = rate of emission in pounds per hour; and
P = process weight rate in tons per hour
= 31.2 tons per hour

$E = 55.0\ (31.2)^{0.11} - 40$
= 40.3 pounds per hour (176.5 tons per year)

The potential controlled PM emissions from the shotblast machine (Unit 350) are 1.1 pounds per hour, therefore, this facility is in compliance with 326 IAC 6-3-2.

The PM emissions from the new shotblast machine (Unit 360) shall be limited to 6.87 pounds per hour. This emission limit is based on a process weight rate of 4,320 pounds per hour and the following equation:

$E = 4.10\ P^{0.67}$ where E = rate of emission in pounds per hour; and
P = process weight rate in tons per hour
= 2.16 tons per hour

$E = 4.10\ (2.16)^{0.67}$
= 6.87 pounds per hour (30.1 tons per year)

The potential controlled PM emissions from the new shotblast machine (Unit 360) are 0.37 pounds per hour, therefore, this facility is in compliance with 326 IAC 6-3-2.

326 IAC 8-1-6 (New Facilities, General Reduction Requirements)

Rule 8-1-6 applies to new facilities (as of January 1, 1980) which have potential emissions of 25 tons or more per year of volatile organic compounds (VOC). The potential VOC emissions from each of the five (5) reverberatory furnaces (Units 001, 002, 020, 021, and 022), each of the four (4) semi-permanent molding operations (Units 100, 101, 102, and 103), and the core removal operation (Unit 230) are each below the twenty-five (25) tons per year applicability threshold and are therefore, not subject to the requirements of 326 IAC 8-1-6.

The core making operations (Unit 200) are subject to 326 IAC 8-1-6. This rule requires all facilities constructed after January 1, 1980, which have potential VOC emission rates of 25 or more tons per year, and which are not otherwise regulated by other provisions of 326 IAC 8, to reduce VOC emissions using Best Available Control Technology (BACT). Potential VOC emissions from the core making operations (Unit 200) are 144.7 tons per year. Since the potential VOC emissions are greater than 25 tons per year, the requirements of 326 IAC 8-1-6 apply.

CMI-Precision Mold, Inc. has submitted a BACT analysis on January 27, 1998, as part of this permit application.

The existing TEA scrubbers controlling emissions from the eight (8) core machines in the core making operations (Unit 200) are relatively efficient at removing TEA from the exhaust stream to minimize odors from the core making operation. Application of alternate types of emission control equipment to the core machines would not result in TEA emission control efficiencies in excess of those provided by the existing scrubbers. Therefore, the application of emission control equipment to the existing TEA scrubber exhausts was evaluated. The remaining VOC exhaust represents fugitive emissions that need to be captured before add-on control equipment can be used.

The options considered in the BACT analysis for the core making operations (Unit 200) are:

(1) Thermal Incineration
(2) Catalytic Incineration
(3) Condensation
(4) Carbon Adsorption

Condensation was determined to be technically infeasible due to the very dilute nature of the exhaust streams.

The effectiveness of carbon adsorption systems for control on these processes is also suspect due to the relatively low concentrations present. The effectiveness of carbon adsorption systems drops dramatically when the inlet concentrations are below 20 to 50 ppm. The expected TEA gas inlet concentration is 26.49 ppmv and the remaining VOC inlet concentration is 11.97 ppmv.

The low inlet concentrations could also make the achievement of substantial concentration reductions difficult for incineration systems.

Nonetheless, cost estimates are provided for the incineration system and for carbon adsorption.

The TEA gas uncontrolled potential emissions are 83.46 tons per year. Using a 90.25 percent overall control efficiency for the scrubbers, the resulting emissions rate is 8.14 tons per year. The remaining VOC emission rate from all eight (8) core box machines, sand mixers, and core storage areas combined is 61.26 tons per year. Therefore, the cost analysis is based on potential TEA emissions of 8.14 tons per year and potential VOC emissions of 61.26 tons per year. The tables below show the results of the cost analyses.

(A) Capital Cost - Add-On Controls for TEA Emissions

Option	Base Price	Direct Cost	Indirect Cost	Total
Catalytic Incineration	165,380	49,700	51,300	266,380
Thermal Regenerative Incineration	340,916	102,200	105,600	548,716
Thermal Recuperative Incineration	212,555	63,800	66,000	342,355
Carbon Adsorption[1]	331,444	199,400	102,600	633,444

(1) A building fee of $100,000 has been included.

(B) Annual Operating, Maintenance & Recovery Cost - Add-On Controls for TEA Emissions

Option	Direct Cost	Indirect Cost	Capital Recovery Cost	Total
Catalytic Incineration	77,408	33,100	43,400	153,908
Thermal Regenerative Incineration	65,112	44,400	89,300	198,812
Thermal Recuperative Incineration	102,838	36,000	55,700	194,538
Carbon Adsorption[1]	75,661	41,400	97,300	214,361

(1) A building fee of $100,000 has been included.

(C) Evaluation - Add-On Controls for TEA Emissions

Option	Potential Emissions (tons/yr)	Emissions Removed (tons/yr)	Control Efficiency (%)	$/ton Removed
Catalytic Incineration	8.14	7.98	98	19,287
Thermal Regenerative Incineration	8.14	7.98	98	24,914
Thermal Recuperative Incineration	8.14	7.98	98	24,378
Carbon Adsorption	8.14	7.98	98	26,862

Methodology:
Emissions removed = (controlled potential emissions from existing wet scrubbers) * (control efficiency)
$/ton removed = total annual cost / emissions removed

(D) Capital Cost - Add-On Controls for VOC Emissions

Option	Base Price	Direct Cost	Indirect Cost	Total
Catalytic Incineration	1,879,907	564,000	582,800	3,026,707
Thermal Regenerative Incineration	4,275,873	1,282,800	1,325,600	6,884,273
Thermal Recuperative Incineration	638,180	191,500	197,800	1,027,480
Carbon Adsorption[1]	4,339,018	2,051,800	1,345,200	7,736,018

(1) A building fee of $750,000 has been included.

(E) Annual Operating, Maintenance & Recovery Cost - Add-On Controls for VOC Emissions

Option	Direct Cost	Indirect Cost	Capital Recovery Cost	Total
Catalytic Incineration	3,323,635	143,500	492,600	3,959,735
Thermal Regenerative Incineration	2,323,001	297,700	1,120,400	3,741,101
Thermal Recuperative Incineration	5,397,006	63,500	167,200	5,627,706
Carbon Adsorption[1]	241,175	254,500	1,158,000	1,653,675

(1) A building fee of $750,000 has been included.

(F) Evaluation - Add-On Controls for VOC Emissions

Option	Potential Emissions (tons/yr)	Emissions Removed (tons/yr)	Control Efficiency (%)	$/ton Removed
Catalytic Incineration	61.26	60.03	98	65,960
Thermal Regenerative Incineration	61.26	60.03	98	62,318
Thermal Recuperative Incineration	61.26	60.03	98	93,745
Carbon Adsorption	61.26	60.03	98	28,836

Methodology:
Emissions removed = (controlled potential VOC emissions) * (control efficiency)
$/ton removed = total annual cost / emissions removed

The cost breakdown is as follows:

1. Capital Cost
   a) Base price: purchase price, auxiliary equipment, instruments, controls, taxes and freight.
   b) Direct installation cost: foundations/supports, erection/handling, electrical, piping, insulation, painting, site preparation and building/facility.

c) Indirect installation cost: engineering, supervision, construction/filed expenses, construction fee, start up, performance test, model study and contingencies.

2. Annual Cost

a) Direct operating cost: operating labor (operator, supervisor), labor and material maintenance, operating materials, utilities (electricity, gas).

b) Indirect operating cost: overhead, property tax, insurance, administration and capital recovery cost (for 10 years life of the system at 10% interest rate).

Based on the cost estimates presented above, use of any of the add-on controls would be economically infeasible. Therefore, BACT for the core making operations (Unit 200) has been determined to be the following:

(a) The eight (8) sulfuric acid scrubbers controlling the eight (8) core machines will continue to be operated in an efficient manner to control TEA emissions.

(b) To minimize the other VOC emissions from the core making operation, efficient sand/resin mixing systems will be utilized to minimize overrun wastage and resin use, and controlled measurement techniques will be used to verify that the mixes are maintained within tight limits and excessive binder use will not occur.

326 IAC 8-6 (Organic Solvent Emission Limitations)

Pursuant to 326 IAC 8-6-1, this rule applies to existing sources as of January 1, 1980, located in Lake and Marion Counties, and sources commencing operation after October 7, 1974 and prior to January 1, 1980 located anywhere in the state with potential VOC emissions. Since none of the facilities at this source commenced operation prior to January 1, 1980, the source is not subject to the requirements of 326 IAC 8-6.

326 IAC 9-1 (Carbon Monoxide Emission Rules)

Pursuant to 326 IAC 9-1, this rules applies to all stationary sources of carbon monoxide emissions commencing operation after March 21, 1972 that have a capacity of ten (10) tons per hour for smelting furnaces. All of the reverberatory furnaces (Units 001, 002, 020, 021, and 022) commenced operation after 1972 but are not subject to the requirements of 326 IAC 9-1 as the maximum capacity of each of the furnaces is under 10 tons per hour.

326 IAC 11-1 (Emission Limitations for Specific Type of Operations)

This rule establishes emission limitations for particulate matter from foundries. Particulate emissions from all foundries beginning operation after December 6, 1968 shall comply with 326 IAC 6-3. Since this foundry began operation in 1984, the source shall comply with the requirements of 326 IAC 6-3. All of the emission units at the source are in compliance with 326 IAC 6-3-2, and are therefore in compliance with the requirements of 326 IAC 11-1.

Compliance Requirements

Permits issued under 326 IAC 2-7 are required to ensure that sources can demonstrate compliance with applicable state and federal rules on a more or less continuous basis. All state and federal rules contain compliance provisions, however, these provisions do not always fulfill the requirement for a more or less continuous demonstration. When this occurs IDEM, OAM in conjunction with the source, must develop specific conditions to satisfy 326 IAC 2-7-5. As a result, compliance requirements are divided into two sections: Compliance Determination Requirements and Compliance Monitoring Requirements.

Compliance Determination Requirements in permit Section D are those conditions that are found more or less directly within state and federal rules and the violation of which serves as grounds for enforcement action. If these conditions are not sufficient to demonstrate continuous compliance, they will be supplemented with Compliance Monitoring Requirements, also in permit Section D. Unlike Compliance Determination Requirements, failure to meet Compliance Monitoring conditions would serve as a trigger for corrective actions and not grounds for enforcement action. However, a violation in relation to a compliance monitoring condition will arise through a source's failure to take the appropriate corrective actions within a specific time period.

The compliance monitoring requirements applicable to this source are as follows:

The two melting and combustion operations (Units 001 and 002) have applicable compliance monitoring conditions as follows:

(a) The total metal throughput to reverberatory furnaces A and B in the melting and combustion operations (Units 001 and 002) shall be limited to 3,467.5 tons per month. This is equivalent to limited PM emissions of 21.3 tons per year, and limited VOC emissions of 4.4 tons per year.

(b) Quarterly reports shall be submitted to OAM Compliance Section. These reports shall include total monthly metal throughput to reverberatory furnaces A and B in the melting and combustion operations (Units 001 and 002).

These monitoring conditions are necessary to avoid the requirements of 326 IAC 2-2 (PSD), and to ensure compliance with 326 IAC 2-7 (Part 70).

The four (4) semi-permanent molding operations (Units 100-103) and the core removal operation (Unit 230) have applicable compliance monitoring conditions as specified below:

(a) The total metal throughput to the four (4) semi-permanent molding operations (Units 100-103) shall be limited to 2,372.5 tons per month. This is equivalent to limited PM emissions of 3.7 tons per year, and limited VOC emissions of 24.3 tons per year.

(b) The total sand throughput to the core removal operation (Unit 230) shall be limited to 1,734 tons per month. This is equivalent to limited PM emissions of 20.8 tons per year, and limited VOC emissions of 12.5 tons per year.

(c) Quarterly reports shall be submitted to OAM Compliance Section. These reports shall include total monthly metal throughput to the four (4) semi-permanent molding operations (Units 100-103) and total monthly sand throughput to the core removal operation (Unit 230).

(d) Daily visible emissions notations of the semi-permanent molding operations and the core knockout exhaust stacks will be performed during normal daylight operations. A trained employee will record whether emissions are normal or abnormal. For processes operated continuously "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time. In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions. A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process. The Preventive Maintenance Plan for this unit shall contain troubleshooting contingency and corrective actions for when an abnormal emission is observed.

These monitoring conditions are necessary to avoid the requirements of 326 IAC 2-2 (PSD) and to ensure compliance with 326 IAC 6-3 (Process Operations) and 326 IAC 2-7 (Part 70).

The core making operation (Unit 200) has applicable compliance monitoring conditions as specified below:

(a) Total VOC usage (not including the TEA Catalyst) in the core making operation (Unit 200) shall be limited such that fugitive VOC emissions (not including TEA emissions) are limited to 3.3 tons per month.

(b) Quarterly reports shall be submitted to OAM Compliance Section. These reports shall include total monthly VOC emissions (not including TEA emissions) from the core making operation (Unit 200).

(c) An inspection shall be performed each calender quarter of all bags controlling sand silos #3 and #4 in the core making process when venting to the outside atmosphere. A baghouse inspection shall be performed within three months of redirected vents to the atmosphere and every three months thereafter. Inspections are optional when venting indoors. All defective bags shall be replaced.

(d) The Permittee shall record the pH of the sulfuric acid in the acid scrubbers controlling the core machines, at least once daily when the core making system is in operation. Unless operated under conditions for which the Preventive Maintenance Plan specifies otherwise, the pH level shall be maintained at or below 4.5 standard units. The addition of sulfuric acid shall be monitored in accordance with the prescribed pH level.

(e) Daily inspection shall be performed for visible leakage of the dust collectors and the acid scrubbers.

(f) To minimize the fugitive VOC emissions from the core making operation, efficient sand/resin mixing systems will be utilized to minimize overrun wastage and resin use, and controlled measurement techniques will be used to verify that the mixes are maintained within tight limits and excessive binder use will not occur.

(g) Daily visible emissions notations of the sand silo exhaust stacks will be performed during normal daylight operations. A trained employee will record whether emissions are normal or abnormal. For processes operated continuously “normal” means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time. In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions. A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process. The Preventive Maintenance Plan for this unit shall contain troubleshooting contingency and corrective actions for when an abnormal emission is observed.

These monitoring conditions are necessary because the dust collector for the sand silos and the acid scrubbers for the core machines in the core making operations must operate properly to ensure compliance with 326 IAC 6-3 (Process Operations), 326 IAC 2-7 (Part 70), and 326 IAC 8-1-6 (New Facilities, General Reduction Requirements), and to avoid the requirements of 326 IAC 2-2.

The shotblast machine (Unit 350) has applicable compliance monitoring conditions as specified below:

(a) The Permittee shall record the total static pressure drop across the baghouse used in conjunction with the shotblast machine, at least once daily when the shotblast machine is in operation when venting to the outside atmosphere. Unless operated under conditions for which the Compliance Response Plan specifies otherwise, the pressure drop across the baghouse shall be maintained within the range of 1.0 and 6.0 inches of water or a range established during the latest stack test. The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when the pressure reading is outside of the above mentioned range for any one reading.

(b) Daily visible emissions notations of the baghouse exhaust stack will be performed during normal daylight operations. A trained employee will record whether emissions are normal or abnormal. For processes operated continuously "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time. In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions. A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process. The Preventive Maintenance Plan for this unit shall contain troubleshooting contingency and corrective actions for when an abnormal emission is observed.

These monitoring conditions are necessary because the baghouse controlling the shotblast machine must operate properly to ensure compliance with 326 IAC 6-3 (Process Operations) and 326 IAC 2-7 (Part 70).

The new shotblast machine (Unit 360) has applicable compliance monitoring conditions as specified below:

(a) Daily visible emissions notations of the baghouse exhaust will be performed during normal daylight operations. A trained employee will record whether emissions are normal or abnormal. For processes operated continuously "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time. In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions. A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.

These monitoring conditions are necessary because the baghouse controlling the shotblast machine must operate properly to ensure compliance with 326 IAC 6-3 (Process Operations) and 326 IAC 2-7 (Part 70) and to avoid the requirements of 326 IAC 2-2 (PSD).

Air Toxic Emissions

Indiana presently requests applicants to provide information on emissions of the 187 hazardous air pollutants set out in the Clean Air Act Amendments of 1990. These pollutants are either carcinogenic or otherwise considered toxic and are commonly used by industries. They are listed as air toxics on the Office of Air Management (OAM) Part 70 Application Form GSD-08.

(a) This source will emit levels of air toxics greater than those that constitute major source applicability according to Section 112 of the Clean Air Act.

Conclusion

The operation of this aluminum foundry shall be subject to the conditions of the attached proposed **Part 70 Permit No. T039-6890-00191.**

Indiana Department of Environmental Management
Office of Air Management

Addendum to the
Technical Support Document for a Part 70 Operating Permit and Enhanced New Source Review (ENSR)

Source Name:	CMI-Precision Mold, Inc.
Source Location:	51650 County Road 133, Bristol, Indiana 46507
County:	Elkhart
SIC Code:	3365, 3398
Operation Permit No.:	T039-6890-00191
Permit Reviewer:	Trish Earls/EVP

On April 3, 1998, the Office of Air Management (OAM) had a notice published in the Elkhart Truth, Elkhart, Indiana, stating that CMI-Precision Mold, Inc. had applied for a Part 70 Operating Permit to operate an aluminum foundry manufacturing cast and machined aluminum products. The notice also stated that OAM proposed to issue a permit for this operation and provided information on how the public could review the proposed permit and other documentation. Finally, the notice informed interested parties that there was a period of thirty (30) days to provide comments on whether or not this permit should be issued as proposed.

Upon further review, the OAM has decided to make the following revisions to the permit (bolded language has been added, the language with a line through it has been deleted). The Table Of Contents has been modified to reflect these changes.

1. Section A (Source Summary) has been revised to clarify that the description of the source in conditions A.1 through A.3 is informational only and does not constitute separately enforceable conditions. The descriptive information in other permit conditions is enforceable.

SECTION A SOURCE SUMMARY

This permit is based on information requested by the Indiana Department of Environmental Management (IDEM), Office of Air Management (OAM) ~~and presented in the permit application.~~ **The information describing the source contained in conditions A.1 through A.3 is descriptive information and does not constitute enforceable conditions. However, the Permittee should be aware that a physical change or a change in the method of operation that may render this descriptive information obsolete or inaccurate may trigger requirements for the Permittee to obtain additional permits or seek modification of this permit pursuant to 326 IAC 2, or change other applicable requirements presented in the permit application.**

2. Condition A.5 (Prior Permit Conditions Superceded) has been deleted. Language has been added to B.14 (Permit Shield) to address the effect of prior permit conditions. U.S. EPA stated that it would object to any permit that contained such supersession language.

3. Condition B.1(b) (Permit No Defense) has been revised to reference the permit shield condition that is found later in Section B.

(b) This prohibition shall not apply to alleged violations of applicable requirements for which the Commissioner has granted a permit shield in accordance with 326 IAC 2-1-3.2 or 326 IAC 2-7-15**, as set out in this permit in the Section B condition entitled "Permit Shield."**

4. Condition B.8 (c) (Duty to Supplement Information) has been revised to clarify how the Permittee may assert a claim that records are confidential information:

(c) Upon request, the Permittee shall also furnish to IDEM, OAM copies of records required to be kept by this permit. **If the Permittee wishes to assert a claim of confidentiality over any of the furnished records,** ~~For information claimed to be confidential~~, the Permittee **must** ~~shall~~ furnish such records to IDEM, OAM along with a claim of confidentiality under 326 IAC 17. If requested by IDEM, OAM, or the U.S. EPA, **to furnish copies of requested records directly to U. S. EPA, and if the Permittee is making a claim of confidentiality regarding the furnished records,** then the Permittee **must** ~~shall~~ furnish such confidential records directly to the U.S. EPA along with a claim of confidentiality under 40 CFR 2, Subpart B.

5. Section B.11 (c) (Annual Compliance Certification) has been revised to match changes to the federal Part 70 rules. The language in (c)(3) has been revised since it appears to be a clarification rather than a change in the requirement. The language in (c)(5) has been added to clarify the treatment of insignificant activities. OAM is revising the nonrule policy document Air-007 NPD to provide more guidance regarding the annual compliance certification requirements for sources with Title V permits:

(c) The annual compliance certification report shall include the following:

(1) The identification of each term or condition of this permit that is the basis of the certification;

(2) The compliance status;

(3) Whether compliance was **based on** continuous or intermittent **data**;

(4) The methods used for determining compliance of the source, currently and over the reporting period consistent with 326 IAC 2-7-5(3); ~~and~~

(5) Any insignificant activity that has been added without a permit revision; and

~~(5)~~ **(6)** Such other facts, as specified in Sections D of this permit, as IDEM, OAM, may require to determine the compliance status of the source.

The ~~notification which shall be submitted~~ **submittal** by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

6. Condition B.12 (a) (Preventive Maintenance Plan) has been revised to more closely match the language in 326 IAC 1-6-3. A provision allowing a one time extension of the time within which the Permittee must prepare and maintain the PMP has also been added to (a).

B.12 Preventive Maintenance Plan [326 IAC 2-7-5(1),(3) and (13)] [326 IAC 2-7-6(1) and (6)] [326 IAC 1-6-3]

(a) If required by specific condition(s) in Section D of this permit, the Permittee shall prepare and maintain Preventive Maintenance Plans (PMP) within ninety (90) days after issuance of this permit, including the following information on each **facility**:

(1) Identification of the individual(s) responsible for inspecting, maintaining, and repairing ~~emission units and associated~~ emission control devices;

(2) A description of the items or conditions that will be inspected and the inspection schedule for said items or conditions;

(3) Identification and quantification of the replacement parts that will be maintained in inventory for quick replacement.

If due to circumstances beyond its control, the PMP cannot be prepared and maintained within the above time frame, the Permittee may extend the date an additional ninety (90) days provided the Permittee notifies:

Indiana Department of Environmental Management
Compliance Branch, Office of Air Management
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

(b) The Permittee shall implement the Preventive Maintenance Plans as necessary to ensure that lack of proper maintenance does not cause or contribute to a violation of any limitation on emissions or potential to emit.

(c) PMP's shall be submitted to IDEM, OAM upon request and shall be subject to review and approval by IDEM, OAM.

7. Condition B.14 (Permit Shield) condition has been revised to clarify how the permit shield affects applicable requirements from previous permits and how the permit shield affects determinations that a specific requirement is not applicable to the source.

B.14 Permit Shield [326 IAC 2-7-15]

(a) This condition provides a permit shield as addressed in 326 IAC 2-7-15.

~~(a)~~ **(b) This permit shall be used as the primary document for determining compliance with applicable requirements established by previously issued permits.** Compliance with the conditions of this permit shall be deemed in compliance with any applicable requirements as of the date of permit issuance, provided **that** ~~either of the following:~~

(1) The applicable requirements are included and specifically identified in this permit; **or**

(2) ~~IDEM, OAM, in acting on the Part 70 permit application or revision, determines in writing that other requirements specifically identified are not applicable to the source, and the Part 70 permit includes the determination or a concise summary thereof.~~ **The permit contains an explicit determination or concise summary of a determination that other specifically identified requirements are not applicable.**

~~(b)~~ **(c)** ~~No permit shield shall apply to any permit term or condition that is determined after issuance of this permit to have been based on erroneous information supplied in the permit application.~~ **If, after issuance of this permit, it is determined that the permit is in nonconformance with an applicable requirement that applied to the source on the date of permit issuance, including any term or condition from a previously issued construction or operation permit, IDEM, OAM shall immediately take steps to reopen and revise this permit and issue a compliance order to the Permittee to ensure expeditious compliance with the applicable requirement until the permit is reissued. The permit shield shall continue in effect so long as the Permittee is in compliance with the compliance order.**

~~(c)~~ **(d)** ~~If, after issuance of this permit, it is determined that the permit is in nonconformance with an applicable requirement, IDEM, OAM, shall immediately take steps to reopen and revise this permit and issue a compliance order to the Permittee to ensure expeditious compliance with the applicable requirement until the permit is reissued. The permit shield shall continue in effect so long as the Permittee is in compliance with the compliance order.~~ **No permit shield shall apply to any permit term or condition that is determined after issuance of this permit to have been based on erroneous information supplied in the permit application.**

~~(d)~~ **(e)** Nothing in 326 IAC 2-7-15 or in this permit shall alter or affect the following:

(1) The provisions of Section 303 of the Clean Air Act (emergency orders), including the authority of the U.S. EPA under Section 303 of the Clean Air Act;

(2) The liability of the Permittee for any violation of applicable requirements prior to or at the time of this permit's issuance;

(3) The applicable requirements of the acid rain program, consistent with Section 408(a) of the Clean Air Act; and

(4) The ability of U.S. EPA to obtain information from the Permittee under Section 114 of the Clean Air Act.

~~(e)~~ **(f)** This permit shield is not applicable to any change made under 326 IAC 2-7-20(b)(2) (Sections 502(b)(10) of the Clean Air Act changes) and 326 IAC 2-7-20(c)(2) (trading based on State Implementation Plan (SIP) provisions).

~~(f)~~ **(g)** This permit shield is not applicable to modifications eligible for group processing until after IDEM, OAM, has issued the modifications. [326 IAC 2-7-12(c)(7)]

~~(g)~~ **(h)** This permit shield is not applicable to minor Part 70 permit modifications until after IDEM, OAM, has issued the modification. [326 IAC 2-7-12(b)(8)]

8. Condition B.16 (Deviations from Permit Requirements and Conditions) has been revised to add the deviation terminology that had been contained in Section C, in the General Reporting Requirements condition:

B.16 Deviations from Permit Requirements and Conditions [326 IAC 2-7-5(3)(C)(ii)]

(a) Deviations from any permit requirements (for emergencies see Section B - Emergency Provisions), the probable cause of such deviations, and any response steps or preventive measures taken shall be reported to:

Indiana Department of Environmental Management
Compliance Branch, Office of Air Management
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

within ten (10) calendar days from the date of the discovery of the deviation.

(b) A deviation is an exceedance of a permit limitation or a failure to comply with a requirement of the permit or a rule. It does not include:

(1) An excursion from compliance monitoring parameters as identified in Section D of this permit unless tied to an applicable rule or limit; or

(2) An emergency as defined in 326 IAC 2-7-1(12); or

(3) Failure to implement elements of the Preventive Maintenance Plan unless lack of maintenance has caused or contributed to a deviation.

(4) Failure to make or record information required by the compliance monitoring provisions of Section D unless such failure exceeds 5% of the required data in any calendar quarter.

A Permittee's failure to take the appropriate response step when an excursion of a compliance monitoring parameter has occurred is a deviation.

~~(b)~~ **(c)** Written notification shall be submitted on the attached Emergency/Deviation Occurrence Reporting Form or its substantial equivalent. **The notification does not need to be certified by the "responsible official" as defined by 326 IAC 2-7-1(34).**

~~(c)~~ **(d)** Proper notice submittal under 326 IAC 2-7-16 satisfies the requirement of this subsection.

9. Condition B.18 (a) (Permit Renewal) has been changed as follows to clarify the treatment of certain trivial activities :

(a) The application for renewal shall be submitted using the application form or forms prescribed by IDEM, OAM, and shall include the information specified in 326 IAC 2-7-4. Such information shall be included in the application for each emission unit at this source, except those emission units included on the trivial or insignificant activities list contained in 326 IAC 2-7-1(21) **and 326 IAC 2-7-1(40).**

10. Conditions B.19 (Administrative Permit Amendment), B.20 (Minor Permit Modification) , and B.21 (Significant Permit Modification) have all been combined into one condition numbered B.19 (Permit Amendment or Modification). Conditions B.20 and B.21 have been deleted. The new Condition B.19 (Permit Amendment or Modification) will read as follows:

B.19 Permit Amendment or Modification [326 IAC 2-7-11] [326 IAC 2-7-12]

(a) The Permittee must comply with the requirements of 326 IAC 2-7-11 or 326 IAC 2-7-12 whenever the Permittee seeks to amend or modify this permit.

(b) Any application requesting an amendment or modification of this permit shall be submitted to:

Indiana Department of Environmental Management
Permits Branch, Office of Air Management
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

Any such application should be certified by the "responsible official" as defined by 326 IAC 2-7-1(34) only if a certification is required by the terms of the applicable rule.

(c) The Permittee may implement the administrative amendment changes addressed in the request for an administrative amendment immediately upon submittal of the request. [326 IAC 2-7-11(c)(3)]

11. Condition B.26 (now renumbered B.24) (Inspection and Entry) has been revised to remove the requirement for an IDEM identification card, which other agencies do not have.

B.26 Inspection and Entry [326 IAC 2-7-6(2)]

Upon presentation of ~~IDEM~~ **proper** identification cards, credentials, and other documents as may be required by law, the Permittee shall allow IDEM, OAM, U.S. EPA, or an authorized representative to perform the following:

(a) Enter upon the Permittee's premises where a Part 70 source is located, or emissions related activity is conducted, or where records must be kept under the conditions of this permit;

(b) Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;

(c) Inspect, at reasonable times, any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit;

(d) Sample or monitor, at reasonable times, substances or parameters for the purpose of assuring compliance with this permit or applicable requirements; and

(e) Utilize any photographic, recording, testing, monitoring, or other equipment for the purpose of assuring compliance with this permit or applicable requirements. [326 IAC 2-7-6(6)]

(1) The Permittee may assert a claim that, in the opinion of the Permittee, information removed or about to be removed from the source by IDEM, OAM, or an authorized representative, contains information that is confidential under IC 5-14-3-4(a). The claim shall be made in writing before or at the time the information is removed from the source. In the event that a claim of confidentiality is so asserted, neither IDEM, OAM, nor an authorized representative, may disclose the information unless and until IDEM, OAM, makes a determination under 326 IAC 17-1-7 through 326 IAC 17-1-9 that the information is not entitled to confidential treatment and that determination becomes final. [IC 5-14-3-4; IC 13-14-11-3; 326 IAC 17-1-7 through 326 IAC 17-1-9]

(2) The Permittee*, and* IDEM, OAM, acknowledge that the federal law applies to claims of confidentiality made by the Permittee with regard to information removed or about to be removed from the source by U.S. EPA. [40 CFR Part 2, Subpart B]

12. Condition B.27 (b)(now re-numbered B.25) (Transfer of Ownership or Operation) has been revised to clarify that this notification does not require a certification by a responsible official.

(b) The written notification shall be sufficient to transfer the permit to the new owner by an administrative amendment pursuant to 326 IAC 2-7-11. **The notification which shall be submitted by the Permittee does not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).**

13. Condition B.28 (now renumbered B.26) (Annual Fee Payment) has been revised to clarify the Permittee's responsibility for the timely payment of annual fees.

B.28 Annual Fee Payment [326 IAC 2-7-19] [326 IAC 2-7-5(7)]

(a) The Permittee shall pay annual fees to IDEM, OAM, within thirty (30) calendar days of receipt of a billing~~. or in a time period consistent with the fee schedule established in 326 IAC 2-7-19.~~ **If the Permittee does not receive a bill from IDEM, OAM the applicable fee is due April 1 of each year.**

(b) Failure to pay may result in administrative enforcement action, or revocation of this permit.

(c) ~~If the Permittee does not receive a bill from IDEM, OAM, thirty (30) calendar days before the due date,~~ The Permittee may call the following telephone numbers: 1-800-451-6027 or 317-233-0425 (ask for OAM, Technical Support and Modeling Section), to determine the appropriate permit fee. ~~The applicable fee is due April 1 of each year.~~

14. Condition C.1 is revised to include all proper rule cites.

C.1 Major Source

Pursuant to 326 IAC 2-2 (Prevention of Significant Deterioration) **and 40 CFR 52.21**, this source is a major source.

15. Condition C.2 (Particulate Matter Emission Limitations For Processes with Process Weight Rates Less Than One Hundred (100) pounds per hour) is a new condition that reads as follows to address the PM emission limitation for facilities below 100 pounds per hour.

C.2 Particulate Matter Emission Limitations For Processes with Process Weight Rates Less Than One Hundred (100) pounds per hour [326 IAC 6-3-2(c)]

Pursuant to 326 IAC 6-3-2(c), the allowable particulate matter emissions rate from any process not already regulated by 326 IAC 6-1 or any New Source Performance Standard, and which has a maximum process weight rate less than 100 pounds per hour shall not exceed 0.551 pounds per hour.

16. Condition C.2 (now renumbered as C.3) (Opacity) has been revised as follows:

C.3 Opacity [326 IAC 5-1]

Pursuant to 326 IAC 5-1-2 (~~Visible Emissions~~ **Opacity** Limitations), except as provided in 326 IAC 5-1-3 (Temporary Exemptions), ~~visible emissions~~ **opacity** shall meet the following, unless otherwise stated in this permit:

(a) ~~Visible Emissions~~ **Opacity** shall not exceed an average of forty percent (40%) ~~opacity~~ **in any one (1) six (6) minute averaging period** ~~in twenty-four (24) consecutive readings~~, as determined in 326 IAC 5-1-4.

(b) ~~Visible Emissions~~ **Opacity** shall not exceed sixty percent (60%) opacity for more than a cumulative total of fifteen (15) minutes (sixty (60) readings **as measured according to 40 CFR 60, Appendix A, Method 9, or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor)**, in a six (6) hour period.

17. Condition C.6 (now renumbered C.7) (Operation of Equipment) has been revised to clarify the requirement.

C.7 Operation of Equipment [326 IAC 2-7-6(6)]

All air pollution control equipment listed in this permit **and used to comply with an applicable requirement** shall be operated at all times that the emission unit vented to the control equipment is in operation. ~~as described in Section D of this permit.~~

18. Conditions C.7 (Asbestos Abatement Projects-Accreditation) and C.14 (Asbestos Abatement Projects) have been combined into one new condition C.8 (Asbestos Abatement Projects).

C.8 Asbestos Abatement Projects [326 IAC 14-10] [326 IAC 18] [40 CFR 61.140]

(a) Notification requirements apply to each owner or operator. If the combined amount of regulated asbestos containing material (RACM) to be stripped, removed or disturbed is at least 260 linear feet on pipes or 160 square feet on other facility components, or at least thirty-five (35) cubic feet on all facility components, then the notification requirements of 326 IAC 14-10-3 are mandatory. All demolition projects require notification whether or not asbestos is present.

(b) The Permittee shall ensure that a written notification is sent on a form provided by the Commissioner at least ten (10) working days before asbestos stripping or removal work or before demolition begins, per 326 IAC 14-10-3, and shall update such notice as necessary, including, but not limited to the following:

(1) When the amount of affected asbestos containing material increases or decreases by at least twenty percent (20%); or

(2) If there is a change in the following:

(A) Asbestos removal or demolition start date;

(B) Removal or demolition contractor; or

(C) Waste disposal site.

(c) The Permittee shall ensure that the notice is postmarked or delivered according to the guidelines set forth in 326 IAC 14-10-3(2).

(d) The notice to be submitted shall include the information enumerated in 326 IAC 14-10-3(3).

All required notifications shall be submitted to:

Indiana Department of Environmental Management
Asbestos Section, Office of Air Management
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

The notifications do not require a certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

(e) Procedures for Asbestos Emission Control
The Permittee shall comply with the emission control procedures in 326 IAC 14-10-4 and 40 CFR 61.145(c). Per 326 IAC 14-10-4 emission control requirements are mandatory for any removal or disturbance of RACM greater than three (3) linear feet on pipes or three (3) square feet on any other facility components or a total of at least 0.75 cubic feet on all facility components.

(f) Indiana Accredited Asbestos Inspector
The Permittee shall comply with 326 IAC 14-10-1(a) that requires the owner or operator, prior to a renovation/demolition, to use an Indiana Accredited Asbestos Inspector to thoroughly inspect the affected portion of the facility for the presence of asbestos. The requirement that the inspector be accredited is federally enforceable.

19. Condition C.8 (now re-numbered C.9) (Performance Testing) is revised to correct a rule citation, add a notification requirement, and clarify that any submittal under this condition does not require a certification by a responsible official:

C.9 Performance Testing ~~[326 IAC 3-2.1]~~ **[326 IAC 3-6]**

(a) All testing shall be performed according to the provisions of 326 IAC~~3-2.1~~ **3-6** (Source Sampling Procedures), except as provided elsewhere in this permit, utilizing methods approved by IDEM, OAM.

A test protocol, except as provided elsewhere in this permit, shall be submitted to:

Indiana Department of Environmental Management
Compliance Data Section, Office of Air Management
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

no later than thirty-five (35) days ~~before~~ **prior to** the intended test date. **The Permittee shall submit a notice of the actual test date to the above address so that it is received at least two weeks prior to the test date.**

(b) All test reports must be received by IDEM, OAM within forty-five (45) days after the completion of the testing. An extension may be granted by the Commissioner, if the source submits to IDEM, OAM, a reasonable written explanation within five (5) days prior to the end of the initial forty-five (45) day period.

The documentation submitted by the Permittee does not require certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

20. Condition C.9 (now re-numbered C.10) (Compliance Schedule) has been revised to more closely match the rule language.

C.10 Compliance Schedule [326 IAC 2-7-6(3)]

The Permittee:

(a) **Has certified that all facilities at this source are in compliance with all applicable requirements; and** ~~Will continue to comply with such requirements that become effective during the term of this permit; and~~

(b) Has submitted a statement that the Permittee will continue to comply with such requirements; and

(c) **Will comply with such applicable requirements that become effective during the term of this permit.** ~~Has certified that all facilities at this source are in compliance with all applicable requirements.~~

21. Condition C.10 (now re-numbered C.11) (Compliance Monitoring) has been revised to allow a one time extension of the time to install and initiate any required monitoring.

C.11 Compliance Monitoring [326 IAC 2-7-5(3)] [326 IAC 2-7-6(1)]

Compliance with applicable requirements shall be documented as required by this permit. The Permittee shall be responsible for installing any necessary equipment and initiating any required monitoring related to that equipment, no more than ninety (90) days after receipt of this permit. If due to circumstances beyond its control, this schedule cannot be met, the Permittee **may extend compliance schedule an additional ninety (90) days provided the Permittee** ~~shall~~ notifies:

Indiana Department of Environmental Management
Compliance Branch, Office of Air Management
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

in writing, **prior to the end of the initial ninety (90) day compliance schedule** ~~no more than ninety (90) days after receipt of this permit~~, with full justification of the reasons for the inability to meet this date. ~~and a schedule which it expects to meet. If a denial of the request is not received before the monitoring is fully implemented, the schedule shall be deemed approved.~~

The notification which shall be submitted by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

22. Condition C.12 (now re-numbered as C.13) (Monitoring Methods) has been revised to clarify the requirement.

C.13 Monitoring Methods [326 IAC 3]

Any monitoring or testing performed to meet the **applicable** requirements of this permit shall be performed according to the provisions of 326 IAC 3, 40 CFR 60, Appendix A, or other approved methods as specified in this permit.

23. Condition C.16 (Risk Management Plan) has been revised to more closely match the rule language of 40 CFR 68 and clarify that any submittal under this condition requires a certification by a responsible official.

C.16 Risk Management Plan [326 IAC 2-7-5(12)] [40 CFR 68.215]

If a regulated substance, subject to 40 CFR 68, is present **in a process** in more than the threshold quantity, 40 CFR 68 is an applicable requirement and the Permittee shall:

(a) Submit:

(1) A compliance schedule for meeting the requirements of 40 CFR 68 by the date provided in 40 CFR 68.10(a); or

(2) As a part of the compliance certification submitted under 326 IAC 2-7-6(5), a certification statement that the source is in compliance with all the requirements of 40 CFR 68, including the registration and submission of a Risk Management Plan (RMP); and

(3) A verification to IDEM, OAM, that a RMP or a revised plan was prepared and submitted as required by 40 CFR 68.

(b) Provide annual certification to IDEM, OAM, that the Risk Management Plan is being properly implemented.

All documents submitted pursuant to this condition shall include the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

24. Condition C.17 (Compliance Monitoring Plan-Failure to Take Response Steps) the following rule cites were changed and added to the title, as follows:

C.17 Compliance Monitoring Plan - Failure to Take Response Steps [326 IAC 2-7-5~~(3)~~]
[326 IAC 2-7-6] [326 IAC 1-6]

25. Condition C.18 is revised to add the following rule cites to the title, and clarify that any submittal under this condition does not require a certification by a responsible official.

C.18 Actions Related to Noncompliance Demonstrated by a Stack Test **[326 IAC 2-7-5] [326 IAC 2-7-6]**

(a) When the results of a stack test performed in conformance with Section C - Performance Testing, of this permit exceed the level specified in any condition of this permit, the Permittee shall take appropriate corrective actions. The Permittee shall submit a description of these corrective actions to IDEM, OAM, within thirty (30) days of receipt of the test results. The Permittee shall take appropriate action to minimize emissions from the affected facility while the corrective actions are being implemented. IDEM, OAM shall notify the Permittee within thirty (30) days, if the corrective actions taken are deficient. The Permittee shall submit a description of additional corrective actions taken to IDEM, OAM within thirty (30) days of receipt of the notice of deficiency. IDEM, OAM reserves the authority to use enforcement activities to resolve noncompliant stack tests.

(b) A retest to demonstrate compliance shall be performed within one hundred twenty (120) days of receipt of the original test results. Should the Permittee demonstrate to IDEM, OAM that retesting in one-hundred and twenty (120) days is not practicable, IDEM, OAM may extend the retesting deadline. Failure of the second test to demonstrate compliance with the appropriate permit conditions may be grounds for immediate revocation of the permit to operate the affected facility.

The documents submitted pursuant to this condition do not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

26. Condition C.19 (a) has been revised to clarify the certification requirement for the emission statement.

C.19 Emission Statement [326 IAC 2-7-5(3)(C)(iii)][326 IAC 2-7-5(7)][326 IAC 2-7-19(c)][326 IAC 2-6]

(a) The Permittee shall submit a**n** ~~certified,~~ annual emission statement **certified pursuant to the requirements of 326 IAC 2-6,** that must be received by April 15 of each year and must comply with the minimum requirements specified in 326 IAC 2-6-4. The annual emission statement shall meet the following requirements:

27. Condition C.21 (General Record Keeping) is revised to add the following rule citation and to change the requirements for keeping records, making records available, and furnishing records, to more closely match the rule language as follows:

C.21 General Record Keeping Requirements [326 IAC 2-7-5(3)~~(B)~~]**[326 IAC 2-7-6]**

(a) Records of all required monitoring data and support information shall be retained for a period of at least five (5) years from the date of monitoring sample, measurement, report, or application. These records shall be kept at the source location **for a minimum of three (3) years** and available **upon the request** ~~within one (1) hour upon verbal request~~ of an IDEM, OAM representative, ~~for a minimum of three (3) years~~. ~~They~~ **The records** may be stored elsewhere for the remaining two (2) years **as long as they are available upon request** ~~providing they are made available within thirty (30) days after written request.~~ **If the Commissioner makes a written request for records to the Permittee, the Permittee shall furnish the records to the Commissioner within a reasonable time.**

28. Condition C.22 (General Reporting Requirements) is revised to clarify what is included in the compliance monitoring reports and clarify that any submittal under this condition does not require a certification by a responsible official. The deviation terminology was moved to a Section B condition titled Deviations from Permit Requirements and Conditions.

C.22 General Reporting Requirements [326 IAC 2-7-5(3)(C)]

(a) To affirm that the source has met all the **compliance monitoring** requirements stated in this permit the source shall submit a Quarterly Compliance **Monitoring** Report. Any deviation from the requirements and the date(s) of each deviation must be reported.

(b) The report required in (a) of this condition and reports required by conditions in Section D of this permit shall be submitted to:

Indiana Department of Environmental Management
Compliance Data Section, Office of Air Management
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

(c) Unless otherwise specified in this permit, any notice, report, or other submission required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAM, on or before the date it is due.

(d) Unless otherwise specified in this permit, any quarterly report shall be submitted within thirty (30) days of the end of the reporting period.

(e) All instances of deviations **as described in Section B- Deviations from Permit Requirements Conditions** must be clearly identified in such reports. ~~A reportable deviation is an exceedance of a permit limitation or a failure to comply with a requirement of the permit or a rule. It does not include:~~

~~(1) An excursion from compliance monitoring parameters as identified in Section D of this permit unless tied to an applicable rule or limit; or~~

~~(2) An emergency as defined in 326 IAC 2-7-1(12); or~~

~~(3) Failure to implement elements of the Preventive Maintenance Plan unless lack of maintenance has caused or contributed to a deviation.~~

~~(4) Failure to make or record information required by the compliance monitoring provisions of Section D unless such failure exceeds 5% of the required data in any calendar quarter.~~

~~A Permittee's failure to take the appropriate response step when an excursion of a compliance monitoring parameter has occurred or failure to monitor or record the required compliance monitoring is a deviation.~~

(f) Any corrective actions or response steps taken as a result of each deviation must be clearly identified in such reports.

(g) The first report shall cover the period commencing on the date of issuance of this permit and ending on the last day of the reporting period.

The documents submitted pursuant to this condition do not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

29. The facility description box in all D sections are revised to include the rule citation:

Facility Description [326 IAC 2-7-5(15)]

30. The Certification Form is revised to clarify which forms require a certification.

31. The Emergency/Deviation Occurrence Reporting Form is revised to eliminate the certification requirement.

32. The Quarterly Compliance Report is renamed the Quarterly Compliance Monitoring Report and is revised to make it easier to understand and use.

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR MANAGEMENT
COMPLIANCE DATA SECTION

PART 70 OPERATING PERMIT
CERTIFICATION

Source Name: CMI-Precision Mold, Inc.
Source Address: 51650 County Road 133, Bristol, Indiana 46507
Mailing Address: 51650 County Road 133, Bristol, Indiana 46507
Part 70 Permit No.: T039-6890-00191

This certification shall be included when submitting monitoring, testing reports/results or other documents as required by this permit.

Please check what document is being certified:

9 Annual Compliance Certification Letter

~~**9** Emergency/Deviation Occurrence Reporting Form~~

9 Test Result (specify) _____

9 Report (specify) _____

9 Notification (specify) _____

9 Other (specify) _____

I certify that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

Signature:

Printed Name:

Title/Position:

Date:

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR MANAGEMENT
COMPLIANCE DATA SECTION
P.O. Box 6015
100 North Senate Avenue
Indianapolis, Indiana 46206-6015
Phone: 317-233-5674
Fax: 317-233-5967

PART 70 OPERATING PERMIT
EMERGENCY/DEVIATION OCCURRENCE REPORT

Source Name: CMI-Precision Mold, Inc.
Source Address: 51650 County Road 133, Bristol, Indiana 46507
Mailing Address: 51650 County Road 133, Bristol, Indiana 46507
Part 70 Permit No.: T039-6890-00191

This form consists of 2 pages **Page 1 of 2**

Check either No. 1 or No.2
9 1. This is an emergency as defined in 326 IAC 2-7-1(12) C The Permittee must notify the Office of Air Management (OAM), within four (**4**) business hours (1-800-451-6027 or 317-233-5674, ask for Compliance Section); and C The Permittee must submit notice in writing or by facsimile within two (**2**) days (Facsimile Number: 317-233-5967), and follow the other requirements of 326 IAC 2-7-16
9 2. This is a deviation, reportable per 326 IAC 2-7-5(3)(c) C The Permittee must submit notice in writing within ten (**10**) calendar days

If any of the following are not applicable, mark N/A

Facility/Equipment/Operation:
Control Equipment:
Permit Condition or Operation Limitation in Permit:
Description of the Emergency/Deviation:
Describe the cause of the Emergency/Deviation:

If any of the following are not applicable, mark N/A **Page 2 of 2**

Date/Time Emergency/Deviation started:
Date/Time Emergency/Deviation was corrected:
Was the facility being properly operated at the time of the emergency/deviation? Y N Describe:
Type of Pollutants Emitted: TSP, PM-10, SO_2, VOC, NO_X, CO, Pb, other:
Estimated amount of pollutant(s) emitted during emergency/deviation:
Describe the steps taken to mitigate the problem:
Describe the corrective actions/response steps taken:
Describe the measures taken to minimize emissions:
If applicable, describe the reasons why continued operation of the facilities are necessary to prevent imminent injury to persons, severe damage to equipment, substantial loss of capital investment, or loss of product or raw materials of substantial economic value:

Form Completed by: _____
Title / Position: _____
Date: _____
Phone: _____

~~Attach a signed certification to complete this report.~~

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR MANAGEMENT
COMPLIANCE DATA SECTION

PART 70 OPERATING PERMIT
QUARTERLY COMPLIANCE MONITORING REPORT

Source Name: CMI-Precision Mold, Inc.
Source Address: 51650 County Road 133, Bristol, Indiana 46507
Mailing Address: 51650 County Road 133, Bristol, Indiana 46507
Part 70 Permit No.: T039-6890-00191

Months: _____ to _____ Year: _____

This report is an affirmation that the source has met all the **compliance monitoring** requirements stated in this permit. This report shall be submitted quarterly. Any deviation from the **compliance monitoring** requirements and the date(s) of each deviation must be reported. Additional pages may be attached if necessary. This form can be supplemented by attaching the Emergency/Deviation Occurrence Report. If no deviations occurred, please specify ~~zero in the column marked "No Deviations".~~ **in the box marked "No deviations occurred this reporting period".**

9 **NO DEVIATIONS OCCURRED THIS REPORTING PERIOD.**

9 **THE FOLLOWING DEVIATIONS OCCURRED THIS REPORTING PERIOD:** ~~LIST EACH COMPLIANCE REQUIREMENT EXISTING FOR THIS SOURCE:~~

Compliance Monitoring Requirement (e.g. Permit Condition D.1.3)	**Number of Deviations**	**Date of each Deviations**	**~~No~~ ~~Deviations~~**

Form Completed By: _____
Title/Position: _____
Date: _____
Phone: _____

Attach a signed certification to complete this report.

33. Condition D.1.4 of the Part 70 Operating Permit requires testing of one (1) of the five (5) reverberatory furnaces. The PM emissions for these units were based on emission factors derived from stack testing done on reverberatory furnace A in April, 1993. All five (5) reverberatory furnaces are made by the same manufacturer and all operate in the same manner processing the same type of aluminum. Therefore, the PM emission factor was used for all five (5) furnaces. However, since reverberatory furnaces C and D (Units 020 and 021) have the highest maximum aluminum processing rate and the highest heat input rating, testing on one (1) of these units will represent the worst case emissions for all five (5) furnaces, and the PM emission factors obtained can be applied to all five (5) furnaces. Therefore, stack testing will be required for one (1) of reverberatory furnaces C and D only to verify the PM emission factors used. Condition D.1.4, page 31 of 56, has been revised to clarify what should be tested, to include PM-10 testing since PM-10 is the regulated pollutant in consideration for determining Title V applicability, and to reflect the new model permit changes as follows (changes in bold):

D.1.4 Testing Requirements [326 IAC 2-7-6(1)**,(6)**]

During the period between 18 and 24 months after issuance of this permit, the Permittee shall perform PM **and PM-10** testing on **one (1) of reverberatory furnaces C and D** utilizing Methods 5 or 17 (40 CFR 60, Appendix A) **for PM and Methods 201 or 201A and 202 (40 CFR 51, Appendix M) for PM-10**, or other methods as approved by the Commissioner. This test shall be repeated at least once every five (5) years from the date of this valid compliance demonstration. **PM-10 includes filterable and condensible PM-10. In addition to these requirements, IDEM may require compliance testing when necessary to determine if the facility is in compliance.**

Note: see Response #2 below, page 28, for additional changes to condition D.1.4.

34. The particulate matter emission limit pursuant to 326 IAC 6-3-2 for the semi-permanent molding operations, as stated in condition D.2.2 of the Part 70 Operating permit, is expressed as one limit for all four operations based on the limited metal throughput to all four operations. Since the PM limits pursuant to 326 IAC 6-3-2 should be based on the maximum process weight rates of each of the operations, the limits should not be truncated based on limited process weight rates. A separate allowable PM emission limit should be stated for each operation since each exhausts separately. Also, the statement that the PSD minor limit will satisfy the 326 IAC 6-3-2 limit will be removed because the PSD minor limit is a long term limit and the 326 IAC 6-3-2 limit is a short term limit and the two should not be compared. Part (a) of condition D.2.2 has been removed because the limit on PM emissions to avoid the requirements of 326 IAC 2-2 (PSD) has already been stated in condition D.2.1 so it is not necessary to state it again in condition D.2.2. Condition D.2.2 of the Part 70 Operating permit, page 33 of 56, is revised to read as follows (changes in bold or strikeout):

D.2.2 Particulate Matter (PM) [326 IAC 6-3-2(c)]

~~(a) Emissions of PM from the four (4) semi-permanent molding operations (Units 100 to 103) shall be limited to 3.7 tons per year to avoid the requirements of 326 IAC 2-2 (PSD).~~

~~(b)~~**(a)** Pursuant to 326 IAC 6-3 (Process Operations), the allowable PM emission rate from **each of the three (3) semi-permanent mold making operations (Units 100-102)** shall not exceed **6.5** pounds per hour when **each is** operating at a total process weight rate of **4,000** pounds per hour.

(b) Pursuant to 326 IAC 6-3 (Process Operations), the allowable PM emission rate from the prototype semi-permanent mold making operation (Unit 103) shall not exceed 2.6 pounds per hour when operating at a total process weight rate of 1,000 pounds per hour.

The above pounds per hour limitation**s were** calculated with the following equation:

$E = 4.10\ P^{0.67}$ where E = rate of emission in pounds per hour; and
P = process weight rate in tons per hour

~~Since the PM emissions are limited to 3.7 tons per year to avoid the requirements of 326 IAC 2-2 (PSD), this limit will also satisfy the requirements of 326 IAC 6-3-2.~~

35. A Best Available Control Technology (BACT) determination pursuant to 326 IAC 8-1-6 was made for the core making operations (Unit 200). This determination was erroneously left out of the Part 70 Operating permit. Therefore, a condition stating the BACT determination for the core making operations has been added to the Title V Operating permit, page 36 of 56. The condition reads as follows:

D.3.2 Volatile Organic Compounds (VOC) [326 IAC 8-1-6]

Pursuant to 326 IAC 8-1-6 (New Facilities, General Reduction Requirements), the Best Available Control Technology (BACT) for the core making operation (Unit 200) shall be the following:

(a) The eight (8) sulfuric acid scrubbers controlling the eight (8) core machines will continue to be operated in an efficient manner to control TEA emissions. The scrubbers shall operate at an overall control efficiency of 90.25%. Potential emissions of TEA after control shall not exceed 8.14 tons per year.

(b) To minimize the other VOC emissions from the core making operation, efficient sand/resin mixing systems will be utilized to minimize overrun wastage and resin use, and controlled measurement techniques will be used to verify that the mixes are maintained within tight limits and excessive binder use will not occur.

The subsequent conditions in Section D.3 have been re-numbered accordingly.

36. To clarify what the total VOC emissions from the core making operations (including triethylamine (TEA) emissions) will be such that the requirements of 326 IAC 2-2 do not apply to the emission units constructed in 1984, condition D.3.1 of the Part 70 Operating Permit, page 36 of 56, has been revised as shown in item 40 below.

Condition D.3.10(a) (now re-numbered as D.3.11(a)) of the Part 70 Operating permit, page 38 of 56, has been revised to require record keeping of all VOC usage, including TEA catalyst usage, since the PSD minor limit includes all VOC emissions from the core making operations (Unit 200). Condition D.3.11(a) now reads as follows (changes in strikeout):

(a) To document compliance with Condition D.3.1, the Permittee shall maintain records of the total VOC usage (~~not~~ including the TEA Catalyst) and associated VOC emissions **from** ~~in~~ the core making operation (Unit 200) per month;

37. In 1997, the mold blasting room (Unit 350) was added to the source. To ensure that the PM and PM-10 emissions from the mold blasting room (Unit 350) do not exceed the PSD major modification thresholds of 40 and 15 tons per year, respectively, a new condition D.5.1 has been added to the Part 70 Operating permit limiting PM and PM-10 emissions to 24 and 14 tons per year, respectively. The conditions that were previously numbered as D.5.1 through D.5.9 have been re-numbered as D.5.2 through D.5.10. Condition D.5.3 (now re-numbered as D.5.4) has also been revised to reference new the PM and PM-10 emission limits. See item 41 below for the revised condition D.5.4. The new condition D.5.1 now reads as follows (changes in bold):

D.5.1 PSD Minor Limit [326 IAC 2-2] [40 CFR 52.21]

Emissions of PM and PM-10 from the mold blasting room (Unit 350) shall be limited to 24 and 14 tons per year, respectively, to avoid the requirements of 326 IAC 2-2 (PSD).

The State Rule Applicability - Entire Source section of the TSD is revised to reference the PM and PM-10 limits on the mold blasting room (Unit 350) as follows (changes in bold):

326 IAC 2-2 (Prevention of Significant Deterioration)

This source is not subject to the requirements of 326 IAC 2-2 (PSD). Since this type of operation is one of the 28 listed source categories under 326 IAC 2-2, units 001, 002, 100 through 103, 200, 210, and 230 will be limited as follows so that emissions of PM and VOC are limited to below 100 tons per year to avoid the requirements of 326 IAC 2-2:

(1) The combined metal throughput capacity of the melting and combustion operations (Units 001 and 002) will be limited to 3,467.5 tons per month, which is 50% of the combined maximum metal throughput capacity;
(2) The combined metal throughput capacity of the semi-permanent molding operations (Units 100 through 103) will be limited to 2,372.5 tons per month, which is 50% of the combined maximum metal throughput capacity;
(3) The fugitive VOC emissions (not including TEA emissions which are controlled by the eight (8) wet scrubbers) from the core making operations (Unit 200) will be limited to 3.3 tons per month; and
(4) The combined sand throughput capacity of the core removal operations (Unit 230) will be limited to 1,734 tons per month, which is 50% of the combined maximum sand throughput capacity.

Under the current, acceptable methods for calculating air emissions, the potential emissions for Units 001, 002, 100 through 103, 200, 210, and 230 have been found to be higher than the level of potential emissions calculated when these units were originally registered in 1984. Therefore, to ensure that all of the subsequent modifications to the source are minor PSD modifications, the source is limiting the VOC and PM emissions from the above-mentioned facilities. **The mold blasting room (Unit 350) was added to the source in 1997. Therefore, to ensure that PM and PM-10 emissions from this unit do not exceed the major PSD modification thresholds, PM and PM-10 emissions will be limited to 24 and 14 tons per year, respectively.** The addition of the new shot blasting operation (Unit 360) is a minor modification to a major PSD source because controlled PM and PM10 emissions are 1.61 and 0.16 tons per year, respectively, and are less than the major modification thresholds for PM and PM10 of 25 and 15 tons per year, respectively.

38. To ensure that the PM and PM-10 emissions from the new shot blasting operation (Unit 360) do not exceed the PSD major modification thresholds of 40 and 15 tons per year, respectively, a new condition D.6.6 has been added to the Part 70 Operating permit limiting PM and PM-10 emissions to 24 and 14 tons per year, respectively. The subsequent conditions in section D.6 have been re-numbered accordingly. Condition D.6.8 (now re-numbered as D.6.9) has also been revised to reference new the PM and PM-10 emission limits. See item 41 below for the revised condition D.6.9. The new condition D.6.6 now reads as follows (changes in bold):

D.6.6 PSD Minor Limit [326 IAC 2-2] [40 CFR 52.21]

Emissions of PM and PM-10 from the shotblast machine (Unit 360) shall be limited to 24 and 14 tons per year, respectively, to avoid the requirements of 326 IAC 2-2 (PSD).

39. Torn or otherwise failed bags can have a dramatic effect on bag house performance and few sources have reliable information that demonstrates that compliance can be achieved when compartments are "on line" with torn bags. Conditions D.3.9 (now re-numbered as D.3.10), and D.5.7 (now re-numbered as D.5.9) have been revised to clarify that the emergency provisions of the Title V rule and the corresponding condition in this permit may take precedence if applicable. Condition D.3.10 and condition D.5.9 now read as follows (changes in bold):

D.3.10 Broken **or Failed** Bag ~~or Failure~~ Detection

In the event that bag failure has been observed.

(a) The affected compartments will be shut down immediately until the failed units have been repaired or replaced. ~~For single compartment baghouses, failed units and the associated process will be shut down immediately until the failed units have been repaired or replaced.~~ **Within eight (8) hours of the determination of failure, response steps according to the timetable described in the Compliance Response Plan shall be initiated. For any failure with corresponding response steps and timetable not described in the Compliance Response Plan, response steps shall be devised within eight (8) hours of discovery of the failure and shall include a timetable for completion. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).**

(b) ~~Within eight (8) hours of the determination of failure, response steps according to the timetable described in the Compliance Response Plan shall be initiated. For any failure with corresponding response steps and timetable not described in the Compliance Response Plan, response steps shall be devised within eight (8) hours of discovery of the failure and shall include a timetable for completion.~~ **For single compartment baghouses, failed units and the associated process will be shut down immediately until the failed units have been repaired or replaced. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).**

D.5.9 Broken **or Failed** Bag ~~or Failure~~ Detection

In the event that bag failure has been observed.

(a) The affected compartments will be shut down immediately until the failed units have been repaired or replaced. ~~For single compartment baghouses, failed units and the associated process will be shut down immediately until the failed units have been repaired or replaced.~~ **Within eight (8) hours of the determination of failure, response steps according to the timetable described in the Compliance Response Plan shall be initiated. For any failure with corresponding response steps and timetable not described in the Compliance Response Plan, response steps shall be devised within eight (8) hours of discovery of the failure and shall include a timetable for completion. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).**

(b) ~~Within eight (8) hours of the determination of failure, response steps according to the timetable described in the Compliance Response Plan shall be initiated. For any failure with corresponding response steps and timetable not described in the Compliance Response Plan, response steps shall be devised within eight (8) hours of discovery of the failure and shall include a timetable for completion.~~ **For single compartment baghouses, failed units and the associated process will be shut down immediately until the failed units have been repaired or replaced. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).**

40. Due to recent EPA guidance, IDEM will no longer use the 11/12ths limit. A fixed monthly limit or a 12-consecutive months limit will be used. Based on this, CMI-Precision Mold, Inc. has indicated that they would prefer to have all of the fixed monthly limits changed to 12-consecutive month rolling limits. Therefore, conditions D.1.1, page 30 of 56, condition D.2.1, page 33 of 56, condition D.3.1, page 36 of 56, and condition D.4.1, page 40 of 56, of the Part 70 Operating permit have been revised as follows (changes in bold or strikeout):

D.1.1 PSD Minor Limit [326 IAC 2-2] [40 CFR 52.21]

The total metal throughput to reverberatory furnaces A and B in the melting and combustion operations (Units 001 and 002) shall be limited to **41,610** ~~3,467.5~~ tons per **twelve (12) consecutive** month **period**. This **metal throughput limitation is required to limit the potential to emit of** ~~is equivalent to limited~~ PM **to** ~~emissions of~~ 21.3 tons per **twelve (12) consecutive month period** ~~year~~, and **to limit the potential to emit of** ~~limited~~ VOC **to** ~~emissions of~~ 4.4 tons per **twelve (12) consecutive month period** ~~year~~. **Compliance with this limit makes 326 IAC 2-2 (Prevention of Significant Deterioration) and 40 CFR 52.21 not applicable.** ~~Therefore, the requirements of 326 IAC 2-2 will not apply.~~

D.2.1 PSD Minor Limit [326 IAC 2-2] [40 CFR 52.21]

The total metal throughput to the four (4) semi-permanent molding operations (Units 100-103) shall be limited to **28,470** ~~2,372.5~~ tons per **twelve (12) consecutive** month **period**. This **metal throughput limitation is required to limit the potential to emit of** ~~is equivalent to limited~~ PM **to** ~~emissions of~~ 3.7 tons per **twelve (12) consecutive month period** ~~year~~, and **to limit the potential to emit of** ~~limited~~ VOC **to** ~~emissions of~~ 24.3 tons per **twelve (12) consecutive month period** ~~year~~. **Compliance with this limit makes 326 IAC 2-2 (Prevention of Significant Deterioration) and 40 CFR 52.21 not applicable.** ~~Therefore, the requirements of 326 IAC 2-2 will not apply.~~

D.3.1 PSD Minor Limit [326 IAC 2-2] [40 CFR 52.21]

Total VOC usage (not including the **triethylamine** (TEA) Catalyst) in the core making operation (Unit 200) shall be limited such that fugitive VOC emissions (not including TEA emissions) are limited to **less than 40** ~~3.3~~ tons per **twelve (12) consecutive** month **period**. **Emissions of TEA from the TEA catalyst usage shall be controlled by the eight (8) acid scrubbers and shall not exceed 8.14 tons per year after control. Compliance with this limit makes 326 IAC 2-2 (Prevention of Significant Deterioration) and 40 CFR 52.21 not applicable.** ~~Therefore, the requirements of 326 IAC 2-2 will not apply.~~

D.4.1 PSD Minor Limit [326 IAC 2-2] [40 CFR 52.21]

The total sand throughput to the core removal operation (Unit 230) shall be limited to **20,808** ~~1,734~~ tons per **twelve (12) consecutive** month **period**. This **sand throughput limitation is required to limit the potential to emit of** ~~is equivalent to limited~~ PM **to** ~~emissions of~~ 20.8 tons per **twelve (12) consecutive month period** ~~year~~, and **to limit the potential to emit of** ~~limited~~ VOC **to** ~~emissions of~~ 12.5 tons per **twelve (12) consecutive month period** ~~year~~. **Compliance with this limit makes 326 IAC 2-2 (Prevention of Significant Deterioration) and 40 CFR 52.21 not applicable.** ~~Therefore, the requirements of 326 IAC 2-2 will not apply.~~

The reporting forms on pages 51 through 54 of the Part 70 Operating permit will also be revised so that the fixed monthly limits are changed to 12-month rolling limits.

41. Conditions D.3.5, D.5.3 (now re-numbered as D.5.4), and D.6.8 (now re-numbered as D.6.9), Testing Requirements, of the Part 70 Operating Permit have been revised to reflect the new model permit changes as follows (changes in bold or strikeout):

D.3.5 Testing Requirements [326 IAC 2-7-6(1),(6)]

~~Testing of this facility is not specifically required by this permit.~~ **The Permittee is not required to test this facility by this permit.** However, **IDEM may require compliance testing at any specific time when necessary to determine if the facility is in compliance.** If testing is required **by IDEM**, compliance with the VOC and PM limits specified in Conditions D.3.1, D.3.2, and D.3.3 shall be determined by a performance test conducted in accordance with Section C - Performance Testing. ~~This does not preclude testing requirements on this facility under 326 IAC 2-7-5 and 326 IAC 2-7-6.~~

D.5.4 Testing Requirements [326 IAC 2-7-6(1),(6)]

~~Testing of this facility is not specifically required by this permit.~~ **The Permittee is not required to test this facility by this permit.** However, **IDEM may require compliance testing at any specific time when necessary to determine if the facility is in compliance.** If testing is required **by IDEM**, compliance with the PM **and PM-10** limit**s** specified in Condition**s** D.5.1 **and D.5.2** shall be determined by a performance test conducted in accordance with Section C - Performance Testing. ~~This does not preclude testing requirements on this facility under 326 IAC 2-7-5 and 326 IAC 2-7-6.~~

D.6.9 Testing Requirements [326 IAC 2-7-6(1),(6)]

~~Testing of this facility is not specifically required by this permit.~~ **The Permittee is not required to test this facility by this permit.** However, **IDEM may require compliance testing at any specific time when necessary to determine if the facility is in compliance.** If testing is required **by IDEM**, compliance with the PM **and PM-10** limit**s** specified in Condition**s** D.6.6 **and D.6.7** shall be determined by a performance test conducted in accordance with Section C - Performance Testing. ~~This does not preclude testing requirements on this facility under 326 IAC 2-7-5 and 326 IAC 2-7-6.~~

42. Condition D.3.10 (now re-numbered D.3.11), Record Keeping Requirements, of the Part 70 Operating permit has been revised as follows:

D.3.1~~0~~**1** Record Keeping Requirements

(a) To document compliance with Condition D.3.1, the Permittee shall maintain records of the total VOC usage (including the TEA Catalyst) and associated VOC emissions from the core making operation (Unit 200) per month;

(b) To document compliance with Condition **D.3.7**, the Permittee shall maintain records of daily visible emission notations of the baghouse stack exhaust.

(c) To document compliance with Condition **D.3.8**, the Permittee shall maintain the following:

(1) Daily records of the following operational parameters during normal operation **when venting to the atmosphere:**

(A) pH of the liquid in the eight (8) acid scrubbers.

(2) Documentation of all response steps implemented, per event .

(3) Operation and preventive maintenance logs, including work purchases orders, shall be maintained.

(4) Quality Assurance/Quality Control (QA/QC) procedures.

(5) Operator standard operating procedures (SOP).

(6) Manufacturer's specifications or its equivalent.

(7) Equipment "troubleshooting" contingency plan.

(8) Documentation of the dates vents are redirected.

(d) To document compliance with Condition D.3.9, the Permittee shall maintain records of the results of the inspections required under Condition D.3.9.

(e) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

43. A baghouse inspections condition (Condition D.5.8) for the baghouse controlling shotblast machine in Section D.5 was added to assure the proper operation of the baghouse. The condition is read as follows:

D.5.8 Baghouse Inspections

An inspection shall be performed each calender quarter of all bags controlling shotblast machine when venting to the outside atmosphere. A baghouse inspection shall be performed within three months of redirected vents to the atmosphere and every three months thereafter. Inspections are optional when venting indoors. All defective bags shall be replaced.

44. Preventive Maintenance Plans are required for control devices that are required by IDEM in the permit. The baghouse controlling PM emissions from the new shot blast machine (Unit 360) must be in operation at all times that the shot blast machine is in operation to ensure compliance with 326 IAC 6-3-2 and that the requirements of 326 IAC 2-2 (PSD) do not apply. Since this control device is required by IDEM, a Preventive Maintenance Plan is also required. Therefore, a new condition D.6.8 has been added to the Part 70 Operating permit and reads as follows:

D.6.8 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for this facility and its control device.

45. Additional compliance monitoring conditions have been added to section D.6 to verify that the baghouse controlling the shot blast machine (Unit 360) is operating properly to ensure compliance with 326 IAC 6-3-2 and that the requirements of 326 IAC 2-2 (PSD) do not apply. Three new conditions have been added and read as follows:

D.6.12 Parametric Monitoring

The Permittee shall record the total static pressure drop across the baghouse used in conjunction with the shot blast machine (Unit 360) at least once weekly when the shot blast machine (Unit 360) is in operation when venting to the atmosphere. Unless operated under conditions for which the Compliance Response Plan specifies otherwise, the pressure drop across the baghouse shall be maintained within the range of 1.0 and 6.0 inches of water or a range established during the latest stack test. The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when the pressure reading is outside of the above mentioned range for any one reading.

The instrument used for determining the pressure shall comply with Section C - Pressure Gauge Specifications, of this permit, shall be subject to approval by IDEM, OAM, and shall be calibrated at least once every six (6) months.

D.6.13 Baghouse Inspections

An inspection shall be performed each calender quarter of all bags controlling the woodworking operation when venting to the atmosphere. A baghouse inspection shall be performed within three months of redirecting vents to the atmosphere and every three months thereafter. Inspections are optional when venting to the indoors. All defective bags shall be replaced.

D.6.14 Broken or Failed Bag Detection

In the event that bag failure has been observed:

(a) The affected compartments will be shut down immediately until the failed units have been repaired or replaced. Within eight (8) hours of the determination of failure, response steps according to the timetable described in the Compliance Response Plan shall be initiated. For any failure with corresponding response steps and timetable not described in the Compliance Response Plan, response steps shall be devised within eight (8) hours of discovery of the failure and shall include a timetable for completion. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).

(b) For single compartment baghouses, failed units and the associated process will be shut down immediately until the failed units have been repaired or replaced. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).

Condition D.6.10 (now re-numbered as D.6.15) has been revised to include requirements for record keeping of the parametric monitoring for the baghouse. The revised condition D.6.15 now reads as follows (changes in bold or strikeout):

D.6.15 Record Keeping Requirements

(a) To document compliance with Condition D.6.~~9~~**11**, the Permittee shall maintain records of daily visible emission notations of the baghouse stack exhaust.

(b) To document compliance with Condition D.6.12, the Permittee shall maintain the following:

(1) Daily records of the following operational parameters during normal operation when venting to the atmosphere:

(A) Inlet and outlet differential static pressure; and

(2) Documentation of all response steps implemented, per event .

(3) Operation and preventive maintenance logs, including work purchases orders, shall be maintained.

(4) Quality Assurance/Quality Control (QA/QC) procedures or its equivalent.

(5) Operator standard operating procedures (SOP) or its equivalent.

(6) Manufacturer's specifications or its equivalent.

(7) Equipment "troubleshooting" contingency plan.

(8) Documentation of the dates vents are redirected.

(c) To document compliance with Condition D.6.13, the Permittee shall maintain records of the results of the inspections required under Condition D.6.13 and the dates the vents are redirected.

~~(b)~~**(d)** All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

On April 21, 1998, Brad Saunders submitted comments on the proposed Part 70 permit on behalf of CMI-Precision Mold, Inc. The summary of the comments is as follows:

Comment #1

In condition D.1.2 of the Part 70 Operating permit, for units 001, 002, 020, 021, and 022, please change the requirement to read “the allowable PM emission rate from reverberatory furnaces A and B shall not exceed 18.5 pounds per hour when operating at a total process rate of 19,000 pounds per hour”.

As stated in the description, the total hourly capacity of both Reverbs A & B is 19,000 pounds per hour or 9.5 tons per hour (4.75 ton/hr + 4.75 ton/hr). The allowable PM emission rate should be changed to $(4.10)x(9.5)^{0.67}$ or 18.5 lb/hr. Although long-term throughput is limited to one-half of monthly capacity to avoid 326 IAC 2-2 PSD requirements, the short-term charging capacity of both reverbs is necessary. Short-term capacities should not be truncated from long-term limits. 326 IAC 2-2 has no short-term requirements.

Response #1

Since the PM limits pursuant to 326 IAC 6-3-2 should be based on the maximum process weight rates of the furnaces, the limits should not be truncated based on limited process weight rates. Also, the statement that the PSD minor limit will satisfy the 326 IAC 6-3-2 limit will be removed because the PSD minor limit is a long term limit and the 326 IAC 6-3-2 limit is a short term limit and the two should not be compared. Part (a) of condition D.1.2 has been removed because the limit on PM emissions to avoid the requirements of 326 IAC 2-2 (PSD) has already been stated in condition D.1.1 so it is not necessary to state it again in condition D.1.2. Condition D.1.2 part (b) (now part (a)) of the Part 70 Operating permit, page 30 of 56, is revised to read as follows (changes in bold or strikeout):

~~(b)~~**(a)** Pursuant to 326 IAC 6-3 (Process Operations), the allowable PM emission rate from reverberatory furnaces A and B shall not exceed **18.5** pounds per hour ~~(81.0 tons per year)~~ when operating at a total process weight rate of **19,000** pounds per hour. ~~Since the PM emissions from both furnaces are limited to 21.3 tons per year to avoid the requirements of 326 IAC 2-2 (PSD), this limit will also satisfy the requirements of 326 IAC 6-3-2.~~

Comment #2

In conditions D.1.4, D.2.4, and D.4.4 of the Part 70 Operating Permit, please change the testing period from 18-24 months to 12-24 months. CMI would like a year window to test its equipment, especially since this six month time frame will likely fall during the winter months (based on the estimated date of issuance of this permit).

Response #2

Conditions D.1.4, D.2.4, and D.4.4 of the Part 70 Operating Permit, pages 31, 34, and 40 of 56, have been revised to incorporate the requested changes, to include PM-10 testing since PM-10 is the regulated pollutant in consideration for determining Title V applicability, and to reflect the new model permit changes as follows (changes in bold):

D.1.4 Testing Requirements [326 IAC 2-7-6(1),(6)]

During the period between **12** and 24 months after issuance of this permit, the Permittee shall perform PM and PM-10 testing on one (1) of reverberatory furnaces C and D utilizing Methods 5 or 17 (40 CFR 60, Appendix A) for PM and Methods 201 or 201A and 202 (40 CFR 51, Appendix M) for PM-10, or other methods as approved by the Commissioner. This test shall be repeated at least once every five (5) years from the date of this valid compliance demonstration. PM-10 includes filterable and condensible PM-10. In addition to these requirements, IDEM may require compliance testing when necessary to determine if the facility is in compliance.

D.2.4 Testing Requirements [326 IAC 2-7-6(1)**,(6)**]

During the period between **12** and 24 months after issuance of this permit, the Permittee shall perform PM, **PM-10, and** VOC testing utilizing Methods 5 or 17 (40 CFR 60, Appendix A) **for PM, Methods 201 or 201A and 202 (40 CFR 51, Appendix M) for PM-10,** or other methods as approved by the Commissioner for PM **and PM-10** and methods as approved by the Commissioner for VOC. This test shall be repeated at least once every five (5) years from the date of this valid compliance demonstration. **PM-10 includes filterable and condensible PM-10. In addition to these requirements, IDEM may require compliance testing when necessary to determine if the facility is in compliance.**

D.4.4 Testing Requirements [326 IAC 2-7-6(1)]

During the period between **12** and 24 months after issuance of this permit, the Permittee shall perform PM **and PM-10** testing utilizing Methods 5 or 17 (40 CFR 60, Appendix A) **for PM and Methods 201 or 201A and 202 (40 CFR 51, Appendix M) for PM-10**, or other methods as approved by the Commissioner. This test shall be repeated at least once every five (5) years from the date of this valid compliance demonstration. **PM-10 includes filterable and condensible PM-10. In addition to these requirements, IDEM may require compliance testing when necessary to determine if the facility is in compliance.**

Comment #3

Condition D.1.6 of the Part 70 Operating permit for units 001, 002, 020, 021, and 022 cites keeping visible emissions records for reverberatory furnaces A, B, C, D, and E. Compliance monitoring requirement D.1.5(a) only cites performing visible emissions checks on reverberatory furnaces A and B. If visible emissions monitoring is necessary for all furnaces, please modify condition D.1.5(a) to reflect this fact. If not, please modify this condition by removing the citation to reverberatory furnaces C, D, and E.

Response #3

Visible emissions notations of all the reverberatory furnaces is required. Furnaces C, D, and E were erroneously excluded from condition D.1.5. Therefore, condition D.1.5 part (a), page 31 of 56, is revised to correct this error and to incorporate new language per the latest model permit changes as follows (changes in bold):

(a) Daily visible emission notations of the reverberatory furnaces **A, B, C, D, and E** stack exhausts shall be performed during normal daylight operations **when exhausting to the atmosphere**. A trained employee shall record whether emissions are normal or abnormal.

Comment #4

Although there are four semi-permanent mold making operations, there are not four physical stacks in this operation. As the description states, units 100, 101, 102, and 103 outlet gases through 3, 4, 4, and 0 exhaust fans, respectively. To comply with condition D.2.5(a) of the Part 70 Operating permit for units 100 - 102, CMI can observe all of the fans for each unit and make one general written observation incorporating all fans for that unit. Since unit 103 does not have any outside exhaust, CMI requests that IDEM remove the citation to this unit from the requirement.

Response #4

Condition D.2.5 part (a) of the Part 70 Operating permit, page 34 of 56, has been revised so that daily visible emission notations are required to be performed for the three semi-permanent molding operations (Units 100, 101, and 102) only, since the fourth semi-permanent molding operation (Unit 103) does not exhaust to the outside atmosphere. Also, the reference to the stack exhausts has been replaced with roof fan exhausts and new language per the latest model permit changes has been incorporated. Condition D.2.5 part (a) now reads as follows (changes in bold):

(a) Daily visible emission notations of the **three (3)** semi-permanent molding operations **(Units 100, 101, and 102) roof fan** exhausts shall be performed during normal daylight operations **when exhausting to the atmosphere**. A trained employee shall record whether emissions are normal or abnormal.

Condition D.2.6 part (b), page 35 of 56, has also been revised to require record keeping of visible emissions notations for only three (3) semi-permanent molding operations. Condition D.2.6 part (b) is revised as follows (changes in bold):

(b) To document compliance with Condition D.2.5, the Permittee shall maintain records of daily visible emission notations of the **three (3)** semi-permanent molding operations **(Units 100, 101, and 102) roof fan** exhausts.

Comment #5

In the emission unit description portion of section D.3 of the Part 70 Operating permit, item (j), please change the reference from “eight (7) core machines” to “eight (8) core machines”. The description is correct on page 7, item (j), in the Source Summary. This appears to just by a typographical error.

Response #5

Item (j) of the emission unit description portion of section D.3 of the Part 70 Operating permit, page 36 of 56, is revised as follows (changes in bold):

(j) One (1) core making operation (Unit 200) consisting of five (5) sand silos, three (3) sand heaters, four (4) sand mixers, eight (**8**) core machines, and storage racks, processing sand and resin with a maximum sand process rate of 4.5 tons per hour, with one (1) dust collector (DC-1) on sand silos #3 and #4 for particulate control which exhausts through one (1) stack (Stack 200a), and eight (8) acid scrubbers on the core machines for VOC control which exhaust through five (5) stacks (Stacks 200b through 200f); and

Comment #6

In condition D.3.7 of the Part 70 Operating permit for units 200 and 210, please change “the pH of the liquid shall be maintained at less than or equal to 4.5 standard units” to “the pH of the liquid shall be maintained at less than or equal to 5 standard units”. Per source tests and literature provided to CMI from APC manufacturers, the units are adequately efficient up to 5 standard units.

Response #6

Condition D.3.7, now re-numbered as D.3.8, of the Part 70 Operating permit, page 37 of 56, has been revised as follows:

D.3.8 Parametric Monitoring

The Permittee shall record the pH of the liquid in each of the eight (8) acid scrubbers used in conjunction with the core machines, at least once daily when the core machines are in operation. Unless operated under conditions for which the Compliance Response Plan specifies otherwise, the pH of the liquid shall be maintained at less than or equal to ~~4.5~~ **5.0** standard units. The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when the pH is greater than the above mentioned range for any one reading.

Comment #7

In condition D.3.10 of the Part 70 Operating permit, please remove conditions (4) and (5). CMI-Precision Mold is QS-9001 certified and has Operating Instructions that contain information normally included in QA/QC procedures and SOPs; it does not have QA/QC procedures or SOPs. CMI requests that IDEM replace these two conditions with a condition to maintain Operating Instructions.

Response #7

If CMI maintains Operating Instructions which contain information normally included in QA/QC procedures and SOPs, then these can be considered equivalent to QA/QC procedures and SOPs. Upon request, the source can provide the Operating Instructions with the equivalent QA/QC procedures and SOPs highlighted to fulfill the requirements of this condition. Therefore, condition D.3.10 (now re-numbered D.3.11), will be revised to state that the applicant shall maintain records of QA/QC procedures or their equivalent, and SOPs or their equivalent. Part (c) of condition D.3.10 (now re-numbered D.3.11) is revised to incorporate the above listed changes and the changes discussed in item 42 on page 25 above and now reads as follows (changes in bold):

(c) To document compliance with Condition **D.3.8**, the Permittee shall maintain the following:

(1) Daily records of the following operational parameters during normal operation **when venting to the atmosphere:**

(A) pH of the liquid in the eight (8) acid scrubbers.

(2) Documentation of all response steps implemented, per event .

(3) Operation and preventive maintenance logs, including work purchases orders, shall be maintained.

(4) Quality Assurance/Quality Control (QA/QC) procedures **or its equivalent**.

(5) Operator standard operating procedures (SOP) **or its equivalent**.

(6) Manufacturer's specifications or its equivalent.

(7) Equipment "troubleshooting" contingency plan.

(8) Documentation of the dates vents are redirected.

Comment #8

In condition D.4.2 of the Part 70 Operating permit for unit 230, please change the requirement to read “the allowable PM emission rate from the core removal operation shall not exceed 11.6 pounds per hour when operating at a total process rate of 9,500 pounds per hour”.

As stated in the description, the total hourly capacity of the core removal operation is 9,500 pounds per hour or 4.75 tons per hour. The allowable PM emission rate should be changed to $(4.10)x(4.75)^{0.67}$ or 11.6 lb/hr. Although long-term throughput is limited to one-half of monthly capacity to avoid 326 IAC 2-2 PSD requirements, the short-term capacity of the core removal operation is necessary. Short-term capacities should not be truncated from long-term limits. 326 IAC 2-2 has no short-term requirements.

Response #8

Since the PM limits pursuant to 326 IAC 6-3-2 should be based on the maximum process weight rate of the core removal operation, the limit should not be truncated based on a limited process weight rate. Also, the statement that the PSD minor limit will satisfy the 326 IAC 6-3-2 limit will be removed because the PSD minor limit is a long term limit and the 326 IAC 6-3-2 limit is a short term limit and the two should not be compared. Part (a) of condition D.4.2 has been removed because the limit on PM emissions to avoid the requirements of 326 IAC 2-2 (PSD) has already been stated in condition D.4.1 so it is not necessary to state it again in condition D.4.2. Therefore, condition D.4.2 of the Part 70 Operating permit, page 40 of 56, is revised to read as follows (changes in bold or strikeout):

D.4.2 Particulate Matter (PM) [326 IAC 6-3-2(c)]

~~(a) Emissions of PM from the core removal operation (Unit 230) shall be limited to 20.8 tons per year to avoid the requirements of 326 IAC 2-2 (PSD).~~

~~(b)~~ Pursuant to 326 IAC 6-3 (Process Operations), the allowable PM emission rate from the core removal operation (Unit 230) shall not exceed **11.6** pounds per hour when operating at a process weight rate of **9,500** pounds per hour.

The pounds per hour limitation was calculated with the following equation:

$E = 4.10\ P^{0.67}$ where E = rate of emission in pounds per hour; and P = process weight rate in tons per hour

~~Since the PM emissions are limited to 20.8 tons per year to avoid the requirements of 326 IAC 2-2 (PSD), this limit will also satisfy the requirements of 326 IAC 6-3-2.~~

Comment #9

In condition D.5.8 of the Part 70 Operating permit, for unit 350, please remove the requirement to maintain daily records of cleaning cycle frequency and differential pressure. Failure or inadequate cleaning would be detected by abnormal visible emissions, and is covered under the normal PM plan. Extra parametric monitoring conditions beyond normal pressure drop and visible emission readings are excessive and redundant; the conditions only add extra burden to CMI and provide no realistic means of ensuring a higher degree of compliance with conditions or benefitting the environment.

Response #9

The OAM has decided that the cleaning cycle frequency and differential pressure are not necessary and can be deleted from the operational parameters to be monitored. Therefore, condition D.5.8 (now re-numbered as D.5.10) part (b)(1) of the Part 70 Operating permit, page 43 of 56, has been revised as follows (changes in strikeout):

(b) To document compliance with Condition D.5.~~6~~**7**, the Permittee shall maintain the following:

(1) Daily records of the following operational parameters during normal operation:

(A) Inlet and outlet differential static pressure; ~~and~~

~~(B) Cleaning cycle: frequency and differential pressure.~~

Comment #10

In condition D.5.8 of the Part 70 Operating permit, please remove conditions (4) and (5). CMI-Precision Mold is QS-9001 certified and has Operating Instructions that contain information normally included in QA/QC procedures and SOPs; it does not have QA/QC procedures or SOPs. CMI requests that IDEM replace these two conditions with a condition to maintain Operating Instructions.

Response #10

If CMI maintains Operating Instructions which contain information normally included in QA/QC procedures and SOPs, then these can be considered equivalent to QA/QC procedures and SOPs. Upon request, the source can provide the Operating Instructions with the equivalent QA/QC procedures and SOPs highlighted to fulfill the requirements of this condition. Therefore, condition D.5.8 (now re-numbered as D.5.10) will be revised to state that the applicant shall maintain records of QA/QC procedures or their equivalent, and SOPs or their equivalent. Parts (4) and (5) of condition D.5.10(b), page 44 of 56, is revised to read as follows (changes in bold):

(4) Quality Assurance/Quality Control (QA/QC) procedures **or its equivalent**.

(5) Operator standard operating procedures (SOP) **or its equivalent**.

Comment #11

Condition D.2.4 of the Part 70 Operating permit specifies testing requirements on semi-permanent molding operations. If this circumstance is similar to the reverberatory furnaces, the condition should specify testing of one (1) of the three (3) turntables. Since each turntable has three to four stacks, it is relatively difficult to test a table. A canvas must be dropped around the table, fans must be closed, and exhaust routed to only one or two fans to test. Please reword the condition to refer to testing one of the three tables. Regarding the prototype operation, it would be impossible to test.

Response #11

Since the three (3) semi-permanent molding operations (Units 100 - 102) are identical operations, with the same equipment and the same maximum processing rates, testing one (1) of the units would be acceptable to verify the PM and VOC emission factors used. Testing of the prototype operation will not be required since a test would be very difficult and potential emissions from this operation, which is only used occasionally, are relatively low. Condition D.2.4 of the Part 70 Operating permit, page 34 of 56, has been revised to require testing on one (1) of the three semi-permanent molding operations and to incorporate the new model permit changes as follows (changes in bold):

D.2.4 Testing Requirements [326 IAC 2-7-6(1)**,(6)**]

During the period between **12** and 24 months after issuance of this permit, the Permittee shall perform PM, **PM-10, and** VOC testing **on one (1) of the three (3) semi-permanent molding operations (Units 100 - 102)**, utilizing Methods 5 or 17 (40 CFR 60, Appendix A) **for PM, Methods 201 or 201A and 202 (40 CFR 51, Appendix M) for PM-10,** or other methods as approved by the Commissioner for PM **and PM-10** and methods as approved by the Commissioner for VOC. This test shall be repeated at least once every five (5) years from the date of this valid compliance demonstration. **PM-10 includes filterable and condensible PM-10. In addition to these requirements, IDEM may require compliance testing when necessary to determine if the facility is in compliance.**

Appendix A: Emission Calculations Summary

Company Name: CMI-Precision Mold, Inc.
Address City IN Zip: 51650 County Road 133, Bristol, IN 46507
CP: T039-6890
Plt ID: 039-00191
Reviewer: Trish Earls
Date: January 27, 1998

Uncontrolled Potential Emissions (tons/year)

	Emissions Generating Activity														
Pollutant	Melting and Combustion (Unit 001)	Melting and Combustion (Unit 002)	Melting and Combustion (Unit 020)	Melting and Combustion (Unit 021)	Melting and Combustion (Unit 022)	Semi-Permanent Molding Operations (Unit 100)	Semi-Permanent Molding Operations (Unit 101)	Semi-Permanent Molding Operations (Unit 102)	Prototype Semi-Permanent Molding Operations (Unit 103)	Sand Core Making Operations (Unit 200)	Sand Core Making Prototype Operations (Unit 210)	Core Removal Operations (Unit 230)	Shot Blasting (Units 350 and 360)	Insignificant Activities	**TOTAL**
PM	21.28	21.28	27.68	27.68	14.44	2.28	2.28	2.28	0.57	29.96	1.66	41.61	2,483.98	9.44	2,686.4
PM10	21.28	21.28	27.68	27.68	14.44	2.28	2.28	2.28	0.57	0.65	0.04	6.87	248.40	9.44	385.1
SO2	18.75	18.75	23.75	23.75	11.93	0.18	0.18	0.18	0.04	0.00	0.00	0.00	0.00	0.48	98.0
NOx	19.80	19.80	33.97	33.97	22.49	0.09	0.09	0.09	0.02	0.00	0.00	0.00	0.00	79.33	209.7
VOC	4.39	4.39	5.56	5.56	2.93	14.98	14.98	14.98	3.74	144.72	7.66	24.97	0.00	4.88	253.7
CO	0.84	0.84	3.50	3.50	3.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	17.68	29.5
total HAPs	0.22	0.09	0.12	0.12	0.07	0.00	0.00	0.00	0.00	90.30	1.00	0.00	0.00	0.00	91.9
worst case single HAP	0.08	0.02	0.03	0.03	0.01	0.00	0.00	0.00	0.00	83.46	0.50	0.00	0.00	0.00	84.1

Total emissions based on rated capacity at 8,760 hours/year.

Controlled Potential Emissions (tons/year)

	Emissions Generating Activity														
Pollutant	Melting and Combustion (001)	Melting and Combustion (002)	Melting and Combustion (020)	Melting and Combustion (021)	Melting and Combustion (022)	Semi-Permanent Molding Operations (Unit 100)	Semi-Permanent Molding Operations (Unit 101)	Semi-Permanent Molding Operations (Unit 102)	Prototype Semi-Permanent Molding Operations (Unit 103)	Sand Core Making Operations (200)	Sand Core Making Prototype Operations (210)	Core Removal Operations (Unit 230)	Shot Blasting (Units 350 and 360)	Insignificant Activities	**TOTAL**
PM	10.64	10.64	27.68	27.68	14.44	1.14	1.14	1.14	0.28	22.08	1.66	20.81	6.26	9.44	155.0
PM10	10.64	10.64	27.68	27.68	14.44	1.14	1.14	1.14	0.28	0.48	0.04	3.43	0.62	9.44	108.8
SO2	9.37	9.37	23.75	23.75	11.93	0.09	0.09	0.09	0.02	0.00	0.00	0.00	0.00	0.48	78.9
NOx	9.90	9.90	33.97	33.97	22.49	0.04	0.04	0.04	0.01	0.00	0.00	0.00	0.00	79.33	189.7
VOC	2.20	2.20	5.56	5.56	2.93	7.49	7.49	7.49	1.87	48.14	7.66	12.48	0.00	4.88	115.9
CO	0.42	0.42	3.50	3.50	3.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	17.68	28.6
total HAPs	0.11	0.05	0.12	0.12	0.07	0.00	0.00	0.00	0.00	16.00	1.00	0.00	0.00	0.00	17.5
worst case single HAP	0.04	0.01	0.03	0.03	0.01	0.00	0.00	0.00	0.00	8.14	0.50	0.00	0.00	0.00	8.8

Total emissions based on rated capacity at 8,760 hours/year, after control.

Notes:

1. Pollutant emissions for the melting operations (Unit 001, 002. 020. 021. and 022) are determined by test factors and AIRS emission factors. The combustion data was taken from AP-42. Units 001 and 002 will be limited to 50% of maximum capacity to avoid the requirements of 326 IAC 2-2.
2. Particulate matter and volatile organic compound emissions from the semi-permanent molding operations are determined by stack testing results. Sulfur oxides and nitrogen oxides data are determined by using AIRS emission factors. Units 100 through 103 will be limited to 50% of maximum capacity to avoid the requirements of 326 IAC 2-2.
3. Particulate matter emissions from the core making operations (Unit 200-sand handling and sand silos) are determined by best engineering judgement. Volatile organic compounds emissions (including HAPs) are calculated using mass balance, stack testing, and American Foundrymen Society guidance. Fugitive VOC emissions (not including TEA emissions) from Unit 200 will be limited to 40 tons per year to avoid the requirements of 326 IAC 2-2.
4. Particulate matter emissions from the core making operations (Unit 210-sand handling and sand silos) are determined by best engineering judgement. Volatile organic compounds emissions (including HAPs) aree calculated using mass balance, stack testing, and American Foundrymen Society guidance.
5. Particulate matter emissions from the core removal operations (Unit 230) are determined by best engineering judgement. Volatile organic emissions are determined by AIRS emission factors. Unit 230 will be limited to 50% of maximum capacity to avoid the requirements of 326 IAC 2-2.
6. Particulate matter emissions from the shotblast machines (Units 350 and 360) are determined by AIRS emission factors.

Appendix A: Emission Calculations
Natural Gas Combustion
MM Btu/hr 0.3 - < 10

Company Name: CMI-Precision Mold, Inc.
Address City IN Zip: 51650 County Road 133, Bristol, IN 46507
CP: T039-6890
Plt ID: 6890-00191
Reviewer: Trish Earls
Date: January 27, 1998

Heat Input Capacity MMBtu/hr	Potential Throughput MMCF/yr
9.1	79.7

Heat Input Capacity includes:
One of two (2) natural gas fired reverberatory furnaces each rated at 9.1 MMBtu/hr (Units 001 and 002)

	Pollutant					
	PM	PM10	SO2	NOx	VOC	CO
Emission Factor in lb/MMCF	11.9	11.9	0.6	100.0	5.8	21.0
Potential Emission in tons/yr	0.47	0.47	0.02	3.99	0.23	0.84

Methodology:
MMBtu = 1,000,000 Btu
MMCF = 1,000,000 Cubic Feet of Gas
Emission Factors for NOx: uncontrolled = 100, Low Nox Burner = 17, Flue gas recirculation = 36
Emission Factors for CO: uncontrolled = 21, Low NOx burner = 15, Flue Gas Recirculation = ND.
Potential Throughput (MMCF) = Heat Input Capacity (MMBtu/hr) x 8,760 hrs/yr x 1 MMCF/1,000 MMBtu
Emission Factors from AP 42, Chapter 1.4, Tables 1.4-1, 1.4-2, and 1.4-3, SCC #1-03-006-03
Emission (tons/yr) = Throughput (MMCF/yr) x Emission Factor (lb/MMCF)/2,000 lb/ton

Appendix A: Emissions Calculations
Natural Gas Combustion Only
10 < MM BTU/HR <100
Small Industrial Boiler

Company Name: CMI-Precision Mold, Inc.
Address City IN Zip: 51650 County Road 133, Bristol, IN 46507
CP: T039-6890
Plt ID: 6890-00191
Reviewer: Trish Earls
Date: January 27, 1998

Heat Input Capacity MMBtu/hr	Potential Throughput MMCF/yr
22.8	199.7

Heat Input Capacity includes:
One of two (2) natural gas fired reverberatory furnaces each rated at 22.8 MMBtu/hr (Units 020 and 021)

	Pollutant					
	PM	PM10	SO2	NOx	VOC	CO
Emission Factor in lb/MMCF	14.0	14.0	0.6	140.0	2.8	35.0
Potential Emission in tons/yr	1.4	1.4	0.1	14.0	0.3	3.5

Methodology:
MMBtu = 1,000,000 Btu
MMCF = 1,000,000 Cubic Feet of Gas
Emission Factors for NOx: Uncontrolled = 100, Low NOx burner = 83, Flue gas recirculation = 30
Emission Factors for CO: Uncontrolled = 35, Low NOx Burner = 61, Flue gas recirculation = 34
Potential Throughput (MMCF) = Heat Input Capacity (MMBtu/hr) x 8,760 hrs/yr x 1 MMCF/1,000 MMBtu
Emission Factors are from AP 42, Chapter 1.4, Tables 1.4-1, 1.4-2, 1.4-3, SCC #1-02-006-02
Emission (tons/yr) = Throughput (MMCF/yr) x Emission Factor (lb/MMCF)/2,000 lb/ton

Appendix A: Emissions Calculations
Natural Gas Combustion Only
10 < MM BTU/HR <100
Small Industrial Boiler

Company Name: CMI-Precision Mold, Inc.
Address City IN Zip: 51650 County Road 133, Bristol, IN 46507
CP: T039-6890
Plt ID: 6890-00191
Reviewer: Trish Earls
Date: January 27, 1998

Heat Input Capacity MMBtu/hr	Potential Throughput MMCF/yr
20.4	178.7

Heat Input Capacity includes:
Natural Gas fired reverberatory furnace rated at 20.4 mmbtu/hr (Unit 022)

	Pollutant					
	PM	PM10	SO2	NOx	VOC	CO
Emission Factor in lb/MMCF	14.0	14.0	0.6	140.0	2.8	35.0
Potential Emission in tons/yr	1.3	1.3	0.1	12.5	0.3	3.1

Methodology:
MMBtu = 1,000,000 Btu
MMCF = 1,000,000 Cubic Feet of Gas
Emission Factors for NOx: Uncontrolled = 100, Low NOx burner = 83, Flue gas recirculation = 30
Emission Factors for CO: Uncontrolled = 35, Low NOx Burner = 61, Flue gas recirculation = 34
Potential Throughput (MMCF) = Heat Input Capacity (MMBtu/hr) x 8,760 hrs/yr x 1 MMCF/1,000 MMBtu
Emission Factors are from AP 42, Chapter 1.4, Tables 1.4-1, 1.4-2, 1.4-3, SCC #1-02-006-02
Emission (tons/yr) = Throughput (MMCF/yr) x Emission Factor (lb/MMCF)/2,000 lb/ton

Appendix A: Secondary Metal Production
Aluminum

Company Name: CMI-Precision Mold, Inc.
Address City IN Zip: 51650 County Road 133, Bristol, IN 46507
CP: T039-6890
Plt ID: 6890-00191
Reviewer: Trish Earls
Date: January 27, 1998

SCC# 3-04-001-03
Smelting Furnace/Reverberatory: Units 001/002

TYPE OF MATERIAL	Throughput LBS/HR	1 TON/2000 lbs	TON/HR
Aluminum	9500	2000	4.75

	PM lbs/ton Produced	PM10 lbs/ton Produced	SOx lbs/ton Produced	NOx lbs/ton Produced	VOC lbs/ton Produced	CO lbs/tons Produced
	N/A	N/A	0.9	0.76	0.2	--
Potential Emissions lbs/hr	0.0	0.0	4.3	3.6	1.0	--
Potential Emissions lbs/day	0.0	0.0	102.6	86.6	22.8	--
Potential Emissions tons/year	0.0	0.0	18.7	15.8	4.2	--

SCC# 3-04-001-03
Smelting Furnace/Reverberatory: Units 020/021

TYPE OF MATERIAL	Throughput LBS/HR	1 TON/2000 lbs	TON/HR
Aluminum	12000	2000	6

	PM lbs/ton Produced	PM10 lbs/ton Produced	SOx lbs/ton Produced	NOx lbs/ton Produced	VOC lbs/ton Produced	CO lbs/tons Produced
	N/A	N/A	0.9	0.76	0.2	--
Potential Emissions lbs/hr	0.0	0.0	5.4	4.6	1.2	--
Potential Emissions lbs/day	0.0	0.0	129.6	109.4	28.8	--
Potential Emissions tons/year	0.0	0.0	23.7	20.0	5.3	--

SCC# 3-04-001-03
Smelting Furnace/Reverberatory: Unit 022

TYPE OF MATERIAL	Throughput LBS/HR	1 TON/2000 lbs	TON/HR
Aluminum	6000	2000	3

	PM lbs/ton Produced	PM10 lbs/ton Produced	SOx lbs/ton Produced	NOx lbs/ton Produced	VOC lbs/ton Produced	CO lbs/tons Produced
	N/A	N/A	0.9	0.76	0.2	--
Potential Emissions lbs/hr	0.0	0.0	2.7	2.3	0.6	--
Potential Emissions lbs/day	0.0	0.0	64.8	54.7	14.4	--
Potential Emissions tons/year	0.0	0.0	11.8	10.0	2.6	--

SCC# 3-04-001-14
Pouring/Casting: Units 100, 101, and 102

TYPE OF MATERIAL	Throughput LBS/HR	1 TON/2000 lbs	TON/HR
Aluminum	4000	2000	2

	PM lbs/ton metal produced	PM10 lbs/ton metal produced	SOx lbs/ton metal produced	NOx lbs/ton metal produced	VOC lbs/ton metal produced	CO lbs/tons metal produced
	--	--	0.02	0.01	N/A	--
Potential Emissions lbs/hr	0	0	0.04	0.020	0.000	--
Potential Emissions lbs/day	0	0	0.96	0.480	0.000	--
Potential Emissions tons/year	0	0	0.1752	0.088	0.000	--

SCC# 3-04-001-14
Pouring/Casting: Unit 103

TYPE OF MATERIAL	Throughput LBS/HR	1 TON/2000 lbs	TON/HR
Aluminum	1000	2000	0.5

	PM lbs/ton metal produced	PM10 lbs/ton metal produced	SOx lbs/ton metal produced	NOx lbs/ton metal produced	VOC lbs/ton metal produced	CO lbs/tons metal produced
	--	--	0.02	0.01	N/A	--
Potential Emissions lbs/hr	0	0	0.01	0.005	0.000	--
Potential Emissions lbs/day	0	0	0.24	0.120	0.000	--
Potential Emissions tons/year	0	0	0.0438	0.022	0.000	--

Notes:
N/A: Particulate data was derived from applicant test factors and stack testing results.

Appendix A: Emissions Calculations
Pouring/Casting
Semi-Permanent Molding Operations
Units 100, 101, and 102

Company Name: CMI-Precision Mold, Inc.
Address City IN Zip: 51650 County Road 133, Bristol, IN 46507
CP: T039-6890
Plt ID: 6890-00191
Reviewer: Trish Earls
Date: January 27, 1998

Data is for one (1) semi-permanent molding operation.

Maximum Process Rate (tons/hr)
2.0

	Pollutant					
	PM (a)	PM10 (a)	SO2 (b)	NOx (b)	VOC (a)	CO
Emission Factor in lb/ton	0.26	0.26	0.02	0.01	1.70	0.00
Potential Emission in tons/yr	2.28	2.28	0.18	0.09	14.98	0.00

Notes:
a. Emission factors were derived from stack testing data.
b. Emission factors were derived from AIRS data.

Appendix A: Emissions Calculations
Pouring/Casting
Semi-Permanent Molding Operations
Unit 103

Company Name: CMI-Precision Mold, Inc.
Address City IN Zip: 51650 County Road 133, Bristol, IN 46507
CP: T039-6890
Plt ID: 6890-00191
Reviewer: Trish Earls
Date: January 27, 1998

Data is for one (1) semi-permanent molding operation.

Maximum Process Rate (tons/hr)
0.5

	Pollutant					
	PM (a)	PM10 (a)	SO2 (b)	NOx (b)	VOC (a)	CO
Emission Factor in lb/ton	0.26	0.26	0.02	0.01	1.70	0.00
Potential Emission in tons/yr	0.57	0.57	0.04	0.02	3.74	0.00

Notes:
a. Emission factors were derived from stack testing data.
b. Emission factors were derived from AIRS data.

Appendix A: Emissions Calculations
Sand Loading
Sand Handling and Sand Silo Operations
Unit 200

Company Name: CMI-Precision Mold, Inc.
Address City IN Zip: 51650 County Road 133, Bristol, IN 46507
CP: T039-6890
Plt ID: 6890-00191
Reviewer: Trish Earls
Date: January 27, 1998

Sand Handling Operation:

Maximum Process Rate (tons/hr)
4.50

	Pollutant					
	PM (a)	PM10 (b)	SO2	NOx	VOC	CO
Emission Factor in lb/ton	1.02	0.02	0.00	0.00	0.00	0.00
Potential Emission in tons/yr	20.10	0.43	0.00	0.00	0.00	0.00

Sand Silos

Maximum Process Rate (tons/hr)
4.50

	Pollutant					
	PM (a)	PM10 (b)	SO2	NOx	VOC	CO
Emission Factor in lb/ton	0.50	0.01	0.00	0.00	0.00	0.00
Potential Emission in tons/yr	9.86	0.22	0.00	0.00	0.00	0.00
Controlled Emissions in tons/yr	1.98	0.04				

Total Emissions	PM	PM10
Potential Emission in tons/yr	29.96	0.65
Controlled Emissions in tons/yr	22.09	0.48

Notes:
a. Emission factors were derived from "An Inventory of Foundry Emissions" by Bernard S. Gutow, Modern Casting, January 1972.
b. Emission factors were derived from the PM emission factor and the results of a sieve test performed on the core sand in April, 1993.

Appendix A: Emissions Calculations
Sand Loading
Sand Handling and Sand Silo Operations
Unit 210

Company Name: CMI-Precision Mold, Inc.
Address City IN Zip: 51650 County Road 133, Bristol, IN 46507
CP: T039-6890
Plt ID: 6890-00191
Reviewer: Trish Earls
Date: January 27, 1998

Sand Handling Operation:

Maximum Process Rate (tons/hr)
0.25

	Pollutant					
	PM (a)	PM10 (b)	SO2	NOx	VOC	CO
Emission Factor in lb/ton	1.02	0.02	0.00	0.00	0.00	0.00
Potential Emission in tons/yr	1.12	0.02	0.00	0.00	0.00	0.00

Sand Silos

Maximum Process Rate (tons/hr)
0.25

	Pollutant					
	PM (a)	PM10 (b)	SO2	NOx	VOC	CO
Emission Factor in lb/ton	0.50	0.01	0.00	0.00	0.00	0.00
Potential Emission in tons/yr	0.55	0.01	0.00	0.00	0.00	0.00

Total Emissions	PM	PM10
Potential Emissions in tons/yr	1.66	0.04

Notes:
a. Emission factors were derived from "An Inventory of Foundry Emissions" by Bernard S. Gutow, Modern Casting, January 1972.
b. Emission factors were derived from the PM emission factor and the results of a sieve test performed on the core sand in April, 1993.

Appendix A: HAP Emissions from Core Making Operations

Company Name: CMI-Precision Mold, Inc.
Address City IN Zip: 51650 County Road 133, Bristol, IN 46507
CP: T039-6890
Plt ID: 039-00191
Reviewer: Trish Earls
Date: January 27, 1998

Operation	Source		Weight % Phenol	Weight % Formaldehyde	Weight % Naphthalene	Weight % MDI	Weight % TEA	Weight % Xylene	Weight % Cumene	
Unit 200	Acme Part I Resin		3.00%	0.40%	0.20%	0.00%	0.00%	0.00%	0.00%	
Unit 200	Acme Part II Resin		0.00%	0.00%	0.20%	39.00%	0.00%	0.00%	0.00%	
Unit 200	Acme TEA Catalyst		0.00%	0.00%	0.00%	0.00%	100.00%	0.00%	0.00%	
Unit 200	Cobra Release Agent		0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	
Unit 200	Metal Cleaner 810		0.00%	0.00%	4.50%	0.00%	0.00%	0.00%	0.00%	
Unit 210	Pep Set Part I Resin		7.00%	0.00%	0.00%	0.00%	0.00%	1.68%	0.72%	
Unit 210	Pep Set Part II Resin		0.00%	0.00%	2.06%	21.90%	0.00%	0.06%	0.00%	
Unit 210	Pep Set Catalyst		0.00%	0.00%	0.00%	0.00%	0.00%	6.16%	2.64%	

Total emissions based on rated capacity at 8,760 hours/year.

Operation	Source	Potential VOC Emissions (tons/yr)	Phenol Emissions (tons/yr)	Formaldehyde Emissions (tons/yr)	Naphthalene Emissions (tons/yr)	MDI Emissions (tons/yr)	TEA Emissions* (tons/yr)	Xylene Emissions (tons/yr	Cumene Emissions (tons/yr)	**TOTAL HAPs**
Unit 200	Acme Part I Resin	35.67	1.07	0.14	0.07	0.00	0.00	0.00	0.00	**1.3**
Unit 200	Acme Part II Resin	13.48	0.00	0.00	0.03	5.26	0.00	0.00	0.00	**5.3**
Unit 200	Acme TEA Catalyst	83.46	0.00	0.00	0.00	0.00	83.46	0.00	0.00	**83.5**
Unit 200	Cobra Release Agent	7.15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	**0.0**
Unit 200	Metal Cleaner 810	4.96	0.00	0.00	0.22	0.00	0.00	0.00	0.00	**0.2**
Unit 210	Pep Set Part I Resin	4.51	0.32	0.00	0.00	0.00	0.00	0.08	0.03	**0.4**
Unit 210	Pep Set Part II Resin	2.25	0.00	0.00	0.05	0.49	0.00	0.00	0.00	**0.5**
Unit 210	Pep Set Catalyst	0.89	0.00	0.00	0.00	0.00	0.00	0.06	0.02	**0.1**
Total Uncontrolled HAP emissions (tons/yr)			**1.4**	**0.1**	**0.4**	**5.8**	**83.5**	**0.1**	**0.1**	**91.3**
Total Controlled HAP emissions (tons/yr)			**1.4**	**0.1**	**0.4**	**5.8**	**8.1**	**0.1**	**0.1**	**16.0**

Total emissions based on rated capacity at 8,760 hours/year, after control.

Notes:

* TEA emissions are controlled by eight wet scrubbers with an overall control efficiency of 90.25%.

Appendix A: Secondary Metal Production
Aluminum

Company Name: CMI-Precision Mold, Inc.
Address City IN Zip: 51650 County Road 133, Bristol, IN 46507
CP: T039-6890
Plt ID: 6890-00191
Reviewer: Trish Earls
Date: January 27, 1998

SCC# 3-04-003-40
Shotblast Operations (Unit 350)

TYPE OF MATERIAL	Throughput TON/HR
Steel Molds	31.2

Control Device: Baghouse
Control Efficiency: 99.80%

	PM **lbs/ton throughput** 17.0	**PM10** **lbs/ton throughput** 1.7
Potential Uncontrolled Emissions lbs/hr	530.4	53.0
Potential Uncontrolled Emissions lbs/day	12729.6	1273.0
Potential Uncontrolled Emissions tons/year	**2323.2**	**232.3**
Potential Controlled Emissions lbs/hr	1.1	0.1
Potential Controlled Emissions lbs/day	25.5	2.55
Potential Controlled Emissions tons/year	**4.6**	**0.5**

Note: Emission factors from USEPA's AIRS Facility Subsystem Source Classification Codes and Emission Factor Listing for Criteria Air Pollutants (AIRS), March 1990.

SCC# 3-04-003-40
Shotblast Operations (Unit 360)

TYPE OF MATERIAL	Throughput TON/HR
Aluminum castings	2.16

Control Device: Baghouse
Control Efficiency: 99.00%

	PM **lbs/ton throughput** 17.0	**PM10** **lbs/ton throughput** 1.7
Potential Uncontrolled Emissions lbs/hr	36.7	3.7
Potential Uncontrolled Emissions lbs/day	881.3	88.1
Potential Uncontrolled Emissions tons/year	**160.8**	**16.1**
Potential Controlled Emissions lbs/hr	0.37	3.7E-02
Potential Controlled Emissions lbs/day	8.8	0.88
Potential Controlled Emissions tons/year	**1.6**	**0.16**

Note: Emission factors from USEPA's AIRS Facility Subsystem Source Classification Codes and Emission Factor Listing for Criteria Air Pollutants (AIRS), March 1990.

Appendix A: Emission Calculations
Insignificant Natural Gas Combustion
MM Btu/hr 0.3 - < 10

Company Name: CMI-Precision Mold, Inc.
Address City IN Zip: 51650 County Road 133, Bristol, IN 46507
CP: T039-6890
Plt ID: 6890-00191
Reviewer: Trish Earls
Date: January 27, 1998

Heat Input Capacity MMBtu/hr	Potential Throughput MMCF/yr
170.3	1492.1

Heat Input Capacity includes:
Insignificant combustion units with ratings ranging from 0.63 MMBtu/hr to 6.13 MMBtu/hr.

	Pollutant					
	PM	PM10	SO2	NOx	VOC	CO
Emission Factor in lb/MMCF	11.9	11.9	0.6	100.0	5.8	21.0
Potential Emission in tons/yr	8.88	8.88	0.45	74.60	4.33	15.67

Methodology:
MMBtu = 1,000,000 Btu
MMCF = 1,000,000 Cubic Feet of Gas
Emission Factors for NOx: uncontrolled = 100, Low Nox Burner = 17, Flue gas recirculation = 36
Emission Factors for CO: uncontrolled = 21, Low NOx burner = 15, Flue Gas Recirculation = ND.
Potential Throughput (MMCF) = Heat Input Capacity (MMBtu/hr) x 8,760 hrs/yr x 1 MMCF/1,000 MMBtu
Emission Factors from AP 42, Chapter 1.4, Tables 1.4-1, 1.4-2, and 1.4-3, SCC #1-03-006-03
Emission (tons/yr) = Throughput (MMCF/yr) x Emission Factor (lb/MMCF)/2,000 lb/ton

Appendix A: Emission Calculations
Insignificant Natural Gas Combustion
MM Btu/hr < 0.3

Company Name: CMI-Precision Mold, Inc.
Address City IN Zip: 51650 County Road 133, Bristol, IN 46507
CP: T039-6890
Plt ID: 6890-00191
Reviewer: Trish Earls
Date: January 27, 1998

Heat Input Capacity MMBtu/hr	Potential Throughput MMCF/yr
11.5	100.7

Heat Input Capacity includes:
Forty six (46) mold heating units, each rated at 0.25 MMBtu/hr.

	Pollutant					
	PM	PM10	SO2	NOx	VOC	CO
Emission Factor in lb/MMCF	11.17	11.17	0.6	94.0	11.0	40.0
Potential Emission in tons/yr	0.56	0.56	0.03	4.73	0.55	2.01

Methodology:
MMBtu = 1,000,000 Btu
MMCF = 1,000,000 Cubic Feet of Gas
Potential Throughput (MMCF) = Heat Input Capacity (MMBtu/hr) x 8,760 hrs/yr x 1 MMCF/1,000 MMBtu
Emission Factors from AP 42, Chapter 1.4, Tables 1.4-1, 1.4-2, and 1.4-3, Residential Furnaces (no SCC)
Emission (tons/yr) = Throughput (MMCF/yr) x Emission Factor (lb/MMCF)/2,000 lb/ton